ENGINEERING: PROGRESS REPORT ON A 60-MILE LINE CHANGE

May 13, 1968

RAILWAY AGE

THE TRANSPORTATION WEEKLY

RAILROAD MATERIALS HANDLING: ACCENT ON EFFICIENCY

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Our new Spectrovac is nothing more than a big "know-it-all"

that helps us make higher-quality steel castings

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Scullin Steel Co.'s
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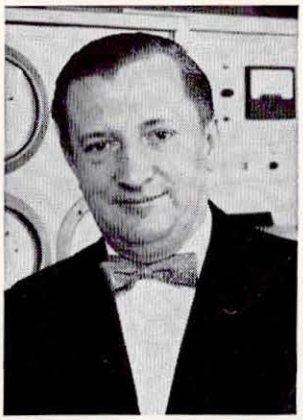

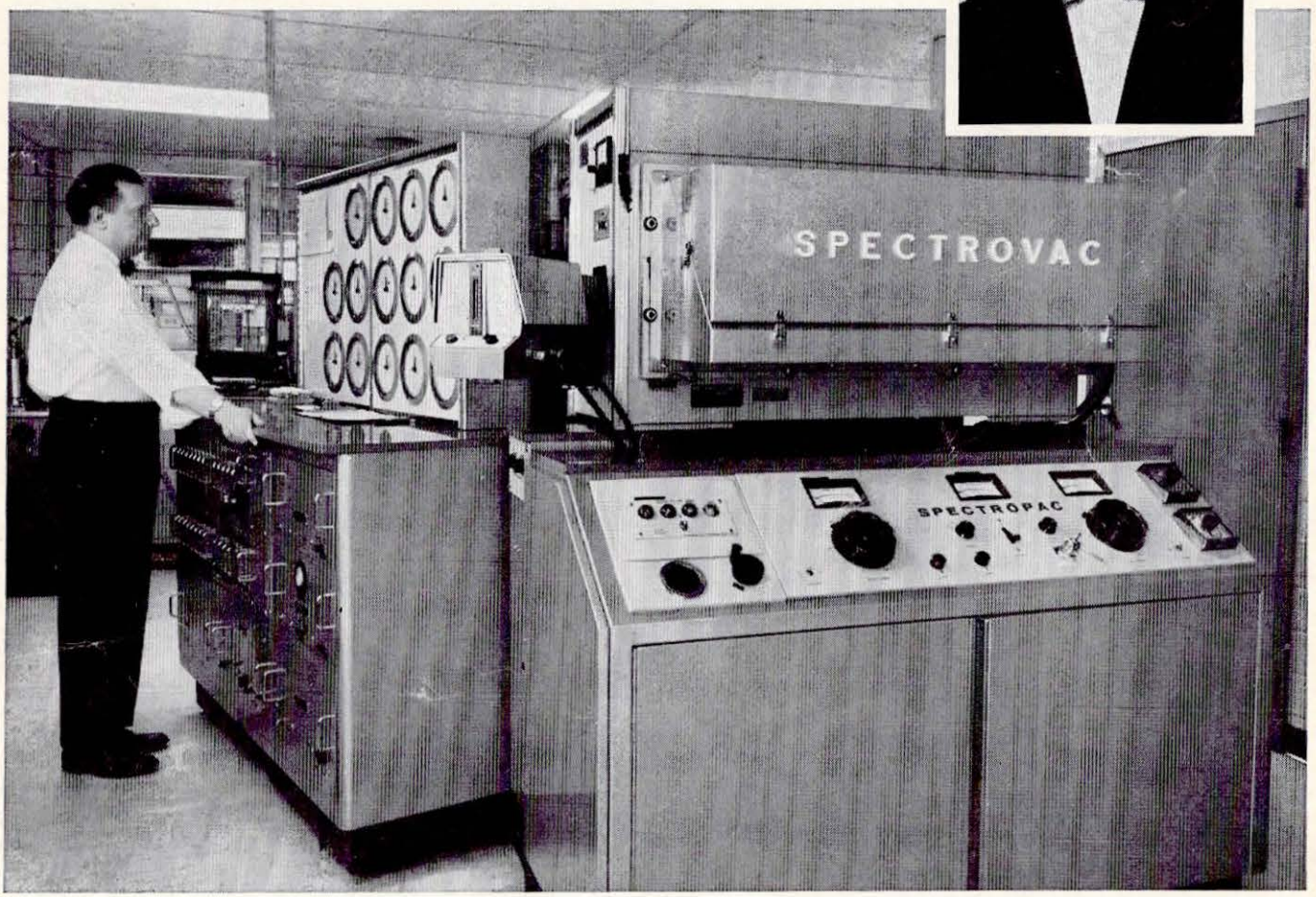

We've recently installed one of modern steelmaking's newest and most technically sophisticated spectrometers. It's an extremely useful instrument which permits our chief metallurgist and his staff to obtain very quick and accurate chemical analyses of the elements in steel. Until now, the determination and control of trace elements was a much longer, less certain process. With Spectrovac giving us the answers, we can control the metal composition of our freight car truck side frame and bolster castings to within the most precise specification limits. The result is a more *rawboned-tough* steel with greater stamina to meet the technical demands of today's high-speed, big payload freight cars. It's just one more forward step in our ability to make better steel castings. *We also call it leadership!*

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Circle 1 on coupon page 34

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Voice and data communications are his specialty—particularly the kind that help keep a railroad running smoothly. He's your source not only for equipment, but for the six services essential to obtaining maximum communications efficiency in your system:

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APPLICATION ENGINEERING. He'll provide systems designed to fit your present or planned network. By working with your people to obtain the network and interface information, he will match equipment to the needs to give you a tailored system.

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CUSTOMER TRAINING. He'll supply you detailed technical manuals on all of our equipment. He'll arrange field seminars for your people, or they can attend our in-plant training schools.

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MAINTENANCE. He'll tell you how you can get the services of field engineers from six Stromberg-Carlson locations across the country—at any time. Our warehouses, strategically placed, will ship the replacement part you need. And technical help comes directly to you from the factory when you call for it.

Meet and talk with our Man-on-the-Scene. He's a professional in voice and data communications. And he likes challenges—the bigger the better. They give him a chance to show what Stromberg-Carlson equipment and backup services can do for your communications. You reach him at Railroad Division, 100 Carlson Road, Rochester, N.Y. 14603

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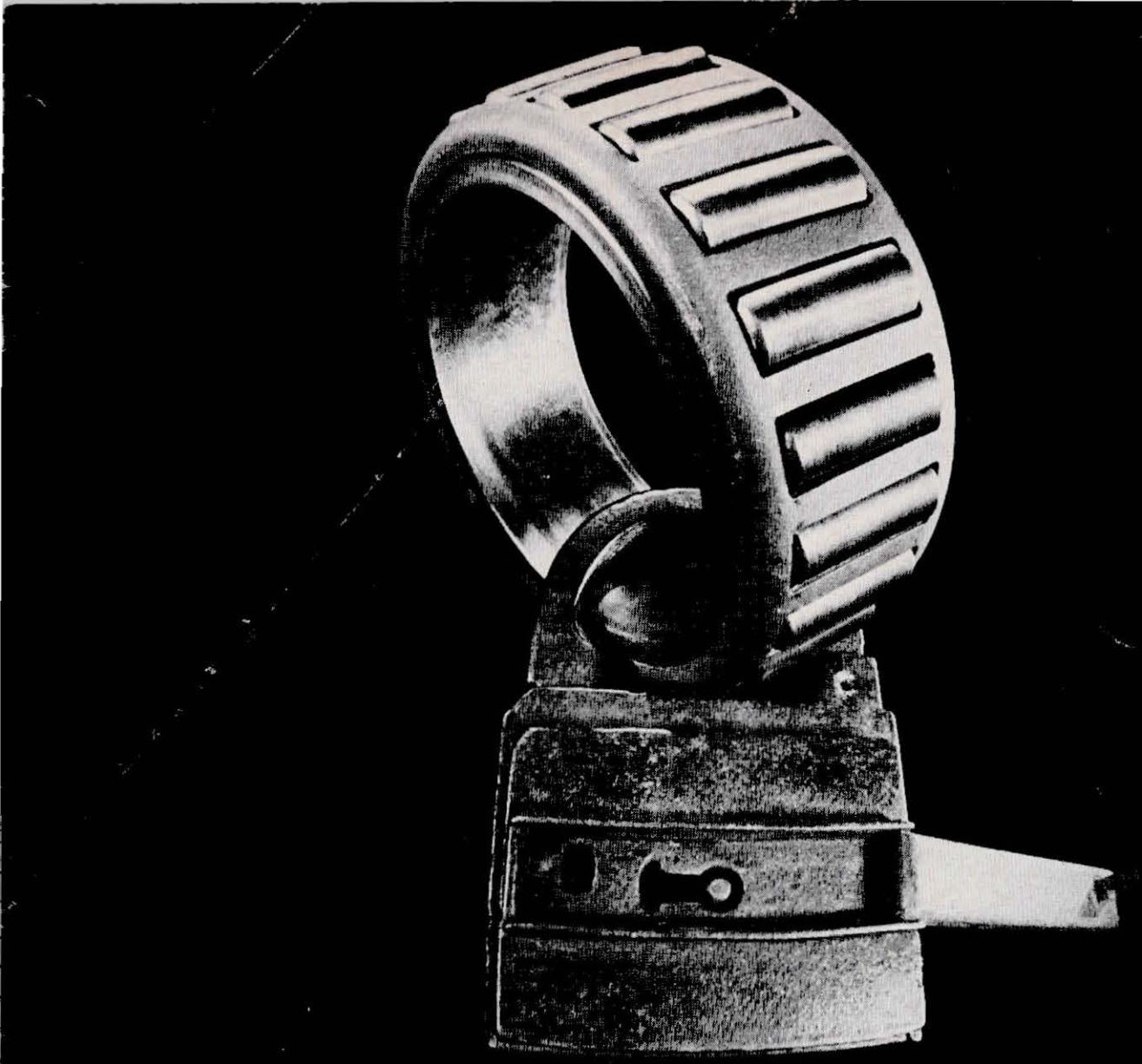

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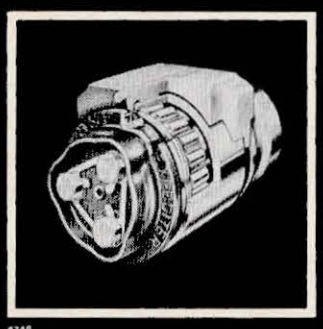

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. . . AND COMING NEXT WEEK

Much has been written about the Northeast Corridor high-speed train experiment—especially from the technical angle. But the big question remains: "Who will ride these trains?" A market analysis prepared exclusively for Railway Age by William E. Griswold, of the management research consulting firm of Arthur D. Little, Inc., suggests some encouraging answers. It will appear in the May 20 issue.

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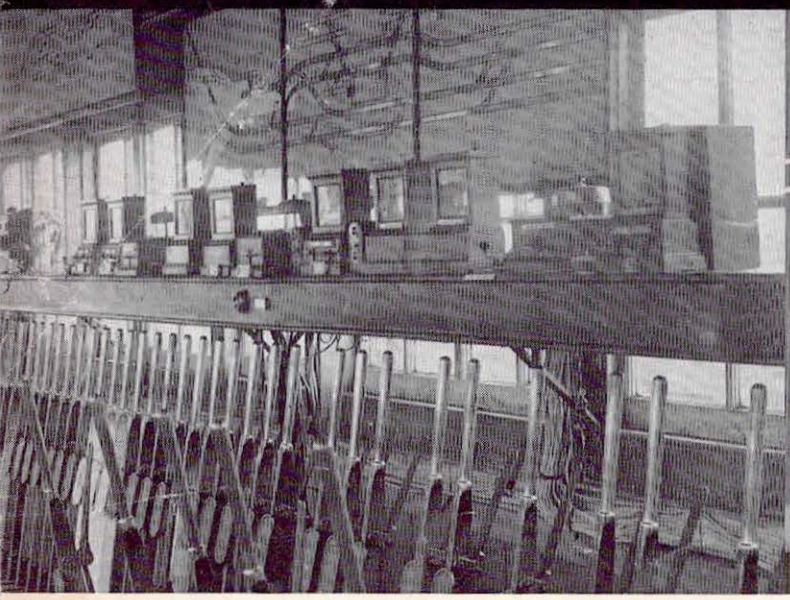
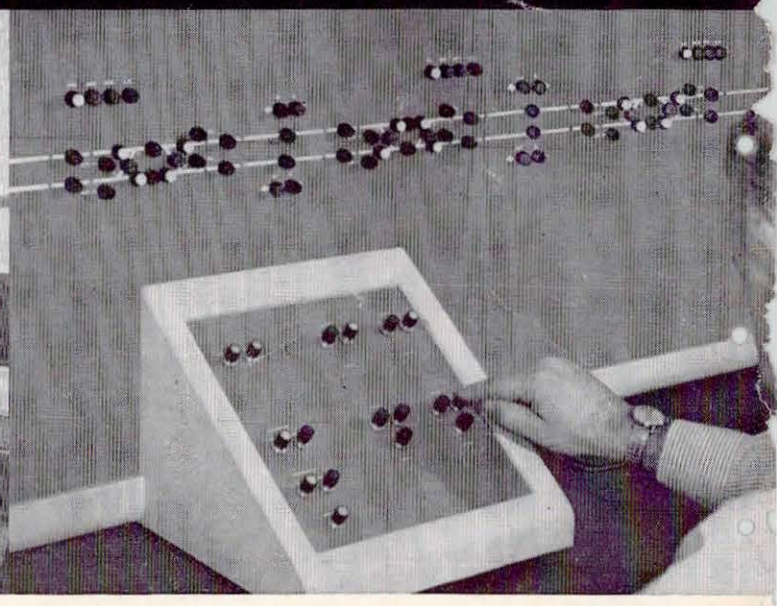
Which would you choose?

hand model... head model





The answer is obvious—brains over brawn every time! But what isn't obvious is why there *still* exist today attended interlocking controls like the one shown above, particularly in this Electronic Age of integrated circuit techniques and coding systems. When the push of a console button can route a train through an interlocking or over a controlled section of line, including selection of route and switch positioning, then who needs a "hand" model? That's why Servo developed a modern head model.

We call it Servoscan™. That's right, the same family name that introduced the Servosafe® Hot Box Detective System to the signaling and communications field.

Servoscan is a solid state remote control system with integrated circuits, designed for operation from a 12-volt source. Control outputs have lockout and cancel provisions, standard coding rate is 300 steps per second, and transmission is by frequency shift tone channels.

Now we get to the best part. Because of Servoscan's modular or "building block" design, the time and cost of systems engineering tailored to a particular application can be kept to a minimum; hence, lower prices to you. Similarly, the basic unit can be expanded or modified to provide for your future requirements.

Servoscan trouble shooting is facilitated by the use of plug-in circuit cards with test points on the front of each card. A manual step feature allows functional tests to be made with a voltmeter instead of an expensive oscilloscope.

Noise interference is nullified with the use of message security by checking message length, parity, station selection, special check bit and bit timing. Other choices of message security are available, such as two out of five, inverted word, etc.—permitting Servoscan to provide maximum performance regardless of system characteristics.

Lastly, Servoscan can accommodate a number of functions with capacities ranging from 16 to 64 addresses in the solid state models. And, of course, Servoscan is available in single station relay systems with capacities for 25 or 50 controls and indications.

We think Servoscan beats all other head models . . . hands down! But, then, we're prejudiced. Find out for yourself. Write to Mr. Vincent J. Niederriter, Sales Dept., for more detailed information.

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Circle 5 on coupon page 34

SHORT AND SIGNIFICANT

New York urged to take over Staten Island RR

The Staten Island Rapid Transit Railway, whose youngest passenger car will never see 40 again, should be taken over by the City of New York, the Metropolitan Transportation Authority has advised. The 14-mile line, serving 22,000 riders a day, is owned by the Baltimore & Ohio, which operates it under a lease agreement with the city. The MTA recommends that the city assume control of the line for $1 and then MTA and the city would spend $25 million to modernize.

President names two new members to Pan Am Congress

President Johnson has appointed Boston & Maine President Richard J. Mulhern, and Paul Howard Croft, Jr., president of the American Short Line Railroad Association, to the U.S. National Commission in the Pan American Railway Congress Association. The Congress will meet in November in Buenos Aires.

In '68, no sad songs for Union Tank Car

Revenues for Union Tank Car showed an increase for the first quarter of 1968 —and earnings were the highest for any first quarter in the company's history. President J. W. Van Gorkom noted that "orders for new tank cars were very satisfactory in the first quarter and continued the upswing which began late in 1967." Van Gorkom said first-quarter results "met our targeted objectives, and a higher percentage of increase over 1967 is projected in our profit plan for later quarters of the year. All forecasts have assumed no change in the income tax rate, not because we believe there will be no increase but because it is impossible to determine the amount or how it will be applied to our circumstances."

Freight car "Who's Who" in use on C&O/B&O

Salesmen and shippers can get the vital statistics on C&O/B&O freight cars by consulting a new catalogue that lists 63,950 merchandise freight cars in the railroads' fleet. The new sales aid was produced by the railroad's commercial development department. It tells the salesman and the shipper the service for which the car was designed, plus key information necessary to match the car to a given traffic. This includes the car's inside dimensions, type and size of doors, truck capacity, load limit, light weight, and special equipment such as movable bulkheads. The roster is cross-indexed by car number and by type, and also contains a handy guide to the density of dry bulk commodities.

Heavy tonnage, but low revenue down East

The Maine Central is one of the goingest little railroads in the nation, and over the past 10 years has racked up a 22.6% increase in tons of freight carried. But, lamented MC President E. Spencer Miller at the road's annual meeting, all that effort only produced a 1.7% increase in revenue. Miller said there was a million ton increase in freight originating at and moving to communities located on the railroad over the 10-year period, but that '68 prospects are not bright. He urged a rate increase for the railroads "if we are to be able to keep on doing the job we have done over the past 10 years."

Southern to use traveling agents in freight work

Small communities on the Southern where the volume of freight handled does not justify employment of a full-time resident freight agent will be serviced by a traveling freight agent, under a plan being tested by the railroad. Southern President W. Graham Claytor, Jr., said the traveling agent would move about by car or truck on a regular schedule and be in radio or telephone contact with his office—and in many cases with the conductor of the local train serving the area. Claytor said the plan has been used on other roads, including the old New York Central and the Burlington, and has proved to be a means of providing better shipper services on branch lines and in light traffic areas.

MONDAY MORNING REPORT

PENN CENTRAL: WHAT'S IN A NAME?

There will be no more "Transportation" in the corporate name of the nation's largest railroad. Along with stockholders' approval of the change to "Penn Central Company" from "Pennsylvania New York Central Transportation Company" at last week's annual meeting in Philadelphia came Chairman Stuart T. Saunders' warning that PC, now also the largest U.S. commercial real-estate venture, would have to improve the rate of return on its massive rail operation or "be driven out of the railroad business." Saunders explained that the new name "more properly reflects the present investment and future interest of the company in diversified activities . . ."

WHERE THE MONEY IS

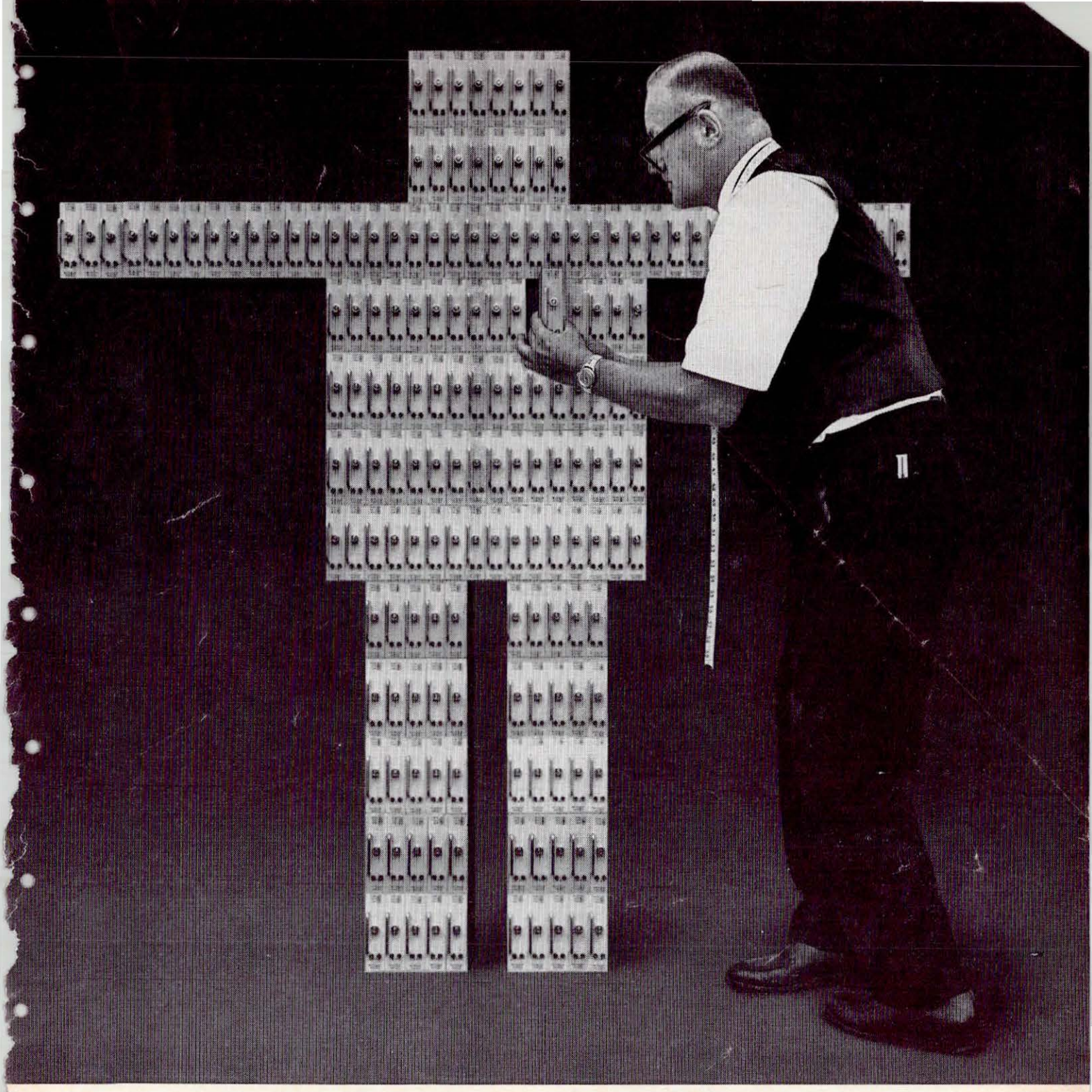
Although 60% of net income over the past five years came from sources other than railroad operations, and diversification is reducing PC vulnerability to rail business fluctuations, Saunders affirmed that the new company is totally committed to its transportation responsibilities and intends "to make our rail operations carry their own weight." He predicted that $80 million of annual merger savings will be realized in considerably less than the eight years originally estimated. First quarter 1968 earnings from the railroad are already up 14.6% over the like 1967 period. With no extended steel strike or other industrial disruptions, and if freight rates do go up, said Saunders, "1968 will be a much better year for PC than 1967."

CHANGE: THE NAME OF THE GAME

Capital spending for rail equipment and facilities in 1968 "equal or surpassing 1967's $280 million" is foreseen by President Alfred E. Perlman, who also stressed the merger's "vast possibilities" for improving service, operations and efficiency. "Change" will be the watchword with emphasis on "innovation in transportation techniques and marketing concepts, as well as cybernetics and technical research."

FINANCING THE FUTURE

Planned by PC is a major simplification of what Finance Committee Chairman David C. Bevan calls "probably the most complicated corporate structure in the country." This has been kicked off by a stock exchange offer which would eliminate Pittsburgh & Lake Erie as a separate company. A multitude of bond issues may be consolidated by creating a blanket mortgage for the entire rail plant. Short-term financing in the form of $100 million in bank loans and $100 million in commercial paper is planned. Future capital requirements may be met with straight or convertible debentures or preferred stocks.



Tailor-Made Multiplex

Recent alterations by Lenkurt engineers to the 46A Multiplex System mean you now have the opportunity to practically design your own system—from a *single channel* all the way to *1,260 channels.*

If you want to fit a single voice channel into your existing 60 to 108 KHz frequency spectrum, all you need is 5¼ inches of shelf space and the 46A single channel package, and you're in business. (Lenkurt is the only major manufacturer of multiplex equipment to offer this complete single channel option.)

The single channel 46A is a complete package including signaling and common equipment. It also can be equipped for speech plus data—custom-made for economical single channel drop-offs. (And if you need to, you can expand the 46A to 1,260 channels without replacing any equipment.)

Yet, with all these alterations, the 46A has all the quality features you've come to expect from Lenkurt: excellent frequency and level stability, as well as low noise performance, plus many protection features.

One last thing: since your system is made to your specification, you don't buy more equipment than you need. That means you save money.

If your plans call for a tailor-made system, call on our 46A. We guarantee a perfect fit. Lenkurt Electric Co., Inc., San Carlos, California. Other offices in Atlanta, Chicago, Dallas, and Stamford, Connecticut.

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GENERAL SYSTEM

Circle 6 on coupon page 34

Take a hard look at Ex-Cell-O F pins.

What you'll see are the toughest railroad pins in the industry. The only ones made to be forgotten. You get the most out of them because we put the best into them. Precision formed of high carbon steel and induction hardened to ⅛" case, Rockwell C60, in the bearing area only. We chamfer the ends to provide lead edge. Drill and chamfer the cotter holes to eliminate cotter pin shearing. Add a zinc coat (a dry lubricant) to prevent galling and freezing. If they cost a little more, remember: F pins won't let you down. Railway Products, Ex-Cell-O Corp., Box 386, Detroit, Michigan 48232.

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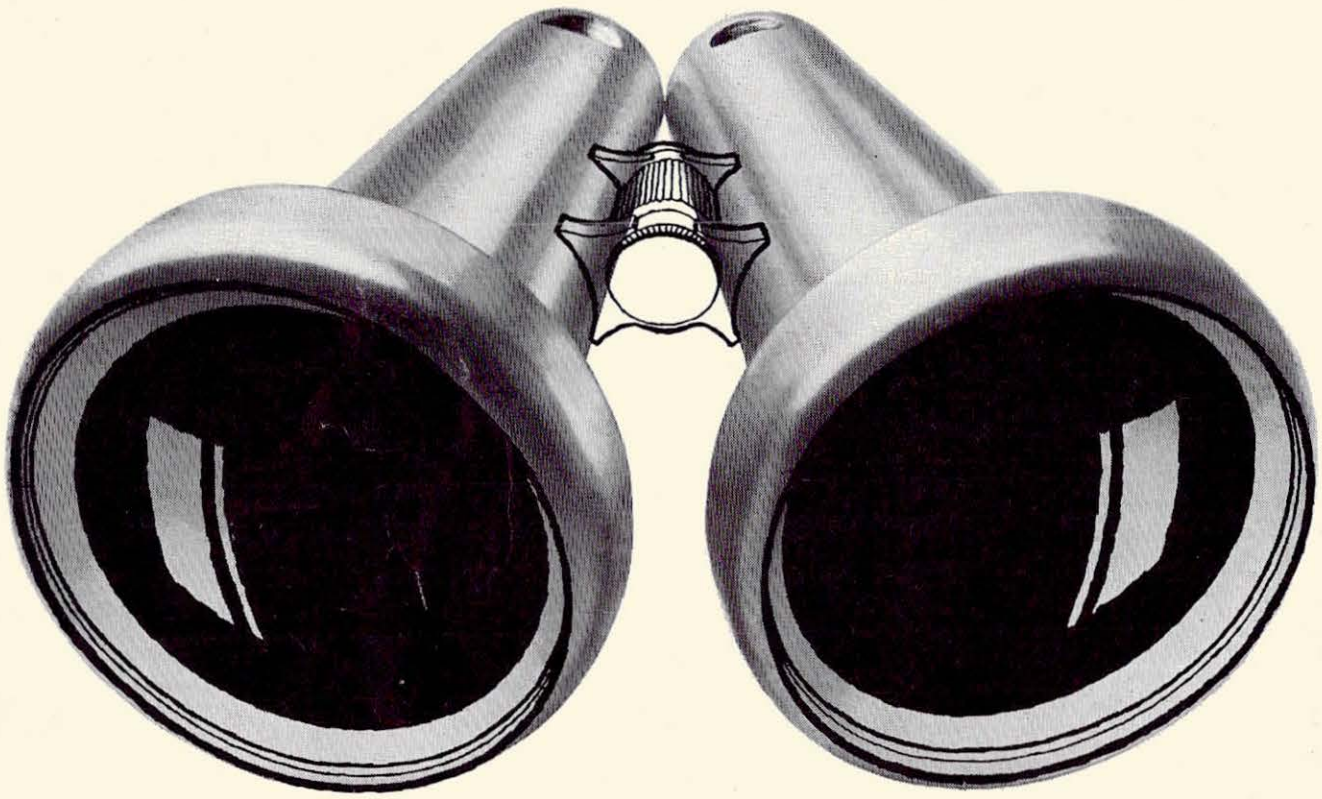


Circle 7 on coupon page 34

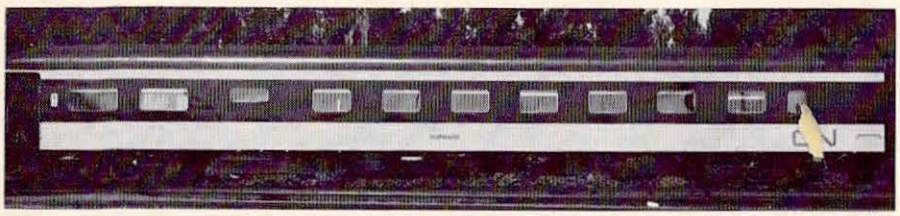
RAILWAY AGE
THE TRANSPORTATION WEEKLY
May 13, 1968

WEEK AT A GLANCE

Robson named interim head of DOT transit unit

President Johnson last week filled two important posts at the Department of Transportation—with a single appointee. Subject to Senate confirmation, he named DOT's general counsel, John Robson, 38, as undersecretary of transportation to fill the vacancy left by the resignation of Everett Hutchinson. And the President also designated Robson as interim administrator of DOT's new Urban Mass Transportation Administration.

UMTA will absorb transit functions transferred to DOT from the Department of Housing and Urban Development under a Presidential reorganization plan which became effective last week after Congress failed to exercise its veto right in the two months allowed. The White House announcement, which came May 8, said that Robson's role as interim administrator will be that of overseeing the transfer of the new DOT unit.



New CN service lets riders get down to business

The busy executive traveling between Montreal and Toronto can now keep busy in custom-built-for-business surroundings in a new service provided by Canadian National.

New "Executive Club" cars (above) —one on each afternoon "Rapido" train—feature private rooms, exclusive meals prepared by a chef assigned to each unit, conference facilities (right) typewriters and a steward to provide personal attention.

Two deluxe seven-bedroom lounge cars have been renovated for the service. The observation lounges at the rear have been designed to convert from a living room arrangement to a dining room or conference room set up.

Fares range from $45 per single room, to $490 for a group of 21 persons, one way. Up to three persons may be accommodated in a room. Fare for two to a room is $35 each; for three to a room, $30.

Reservations are on the same basis as parlor car seats or coach seats on the "Rapido." The service is available to individuals or groups, and the cars may be chartered exclusively by large groups.

D&H shareholders cautioned on vote on N&W merger

Shareholders of the Delaware & Hudson have received letters from the railroad's management warning them that unless the proposed merger of the D&H with the Norfolk & Western is voted in, "in our opinion, the value of your investment in the Delaware & Hudson Company is in serious danger."

Shareholders have been urged to vote against the merger, or to abstain, by Frederic C. Dumaine, Jr., who recently left the D&H presidency. The management-recommended plan to merge with N&W comes up for a vote May 22. A 66 2/3% affirmative vote is needed for approval.

Dumaine has maintained that the inclusion terms are unsatisfactory, and that the road should consider becoming part of a New England-oriented railroad network.

The D&H letter, signed by Harry G. Silleck, Jr., president, and John B. Madden, chairman, said Dumaine's position "is folly" and "goes against an unbiased decision by the Interstate Commerce Commission, upheld by the U. S. Supreme Court."

No track exhibit at autumn rail show

As matters stand, there will be no showcase this autumn in Chicago for rail suppliers whose products have to be displayed on-track. The outdoor track exhibit part of the Combined Railroad Exhibition has been cancelled. It had been scheduled for Sept. 28-Oct. 2, to coincide with meetings of the Coordinated Mechanical Associations. Railway Supply Association spokesmen emphasized, however, that the indoor part of the exhibit, to be held at Chicago's Sherman House, will go on as planned, and it's described as a full house.

GUS WELTY

LINES ON LABOR

IT'S A STRANGE and wondrous thing, this somewhat battered sphere known as the world of management-labor relations. You look around, and you wonder: (1) Trouble in the steel industry is almost taken for granted, and yet over-all bargaining will get off to a much-later-than-usual start this year; (2) the Communication Workers pull the pin on one of the nation's most-automated industries, stay out for 18 days during which service remains virtually normal and then wring a 19.5%, three-year wage-benefit agreement from Ma Bell; (3) the United Mine Workers and catch-all UMW District 50 get into a glaring-match, apparently because the District 50 people aren't totally convinced that Coal Is King; (4) a major airline and the Air Line Pilots' Association reach an interim crew-consist agreement for a new twin-jet aircraft in which 50% of the flights will be operated with three pilots and 50% with two pilots—plus a third pilot who has no duties to perform.

THEN (5) THERE ARE the railroad brotherhoods—proclaiming their concern for the industry's future at the same time they're trying to load it down with people holding jobs which recent history has proved to be unnecessary. As one bemused soul summed it all up, "Alice is in Wonderland, and all's wacky with the world."

IT'S WRONG, most observers would agree, to pin the blame for all of the industry's ailments on rail labor's leaders. But union actions, it often seems, do have the effect of making recovery difficult, if not impossible. It's like force-feeding boilermakers to a guy with an ulcer.

THE COST OF RESTORING trainmen's jobs is not inconsiderable on roads which have already settled their dispute with the Brotherhood of Railroad Trainmen. The cost of restoring jobs on the five roads now under the gun will be staggering, if the BRT firepower proves too much to resist. The cost of restoring firemen's jobs in any number, should the Brotherhood of Locomotive Firemen & Enginemen follow the BRT down the paths of glory—well, just say the effects could be catastrophic to the industry.

PAST WEEKS have been triumphant ones for the BRT. It could be surmised that the Firemen's organization is pacing restlessly, awaiting its call to action. In the midst of all this, maybe somebody should resurrect Thomas Gray, the 18th Century English poet—who had an idea of where those "paths of glory" lead.

ICC authorizes TC abandonment

The Interstate Commerce Commission has given the Tennessee Central, a 287-mile line that runs between Hopkinsville, Ky., and Harriman, Tenn., permission to abandon its operations.

The railroad filed for reorganization under the Bankruptcy Act, then last February asked for suspension of its operations. Coal traffic on the line, its principal revenue producer, fell from 1.3 million tons in 1956 to 35,604 tons in 1967. Chief coal purchaser, a TVA steam plant, switched to buying coal from mines on the Louisville & Nashville, resulting in only a short switching operation for the coal that moved on the TC.

In the past five years, the railroad has had mounting deficits, hitting $1.9 million last year.

The Commission said it authorized abandonment "after a careful consideration of the probable effects upon the communities involved, upon the shippers and receivers dependent upon the services of Tennessee Central, and upon the labor force employed by the applicant itself. The fact of the matter is that the service performed by TC can no longer be sustained by that carrier from its own resources or potential resources."

BAR will curtail small shipments

The Bangor & Aroostook, which fought hard for small shipment traffic at a time when other railroads were edging out of the LCL business, last week decided to give up the fight. BAR president W. Jerome Strout, announced that effective June 20, the railroad will discontinue less-carload service on shipments weighing less than 4,000 pounds. The decision was made, said Strout, because of "substantial losses" on the traffic. The move puts BAR service in line with that in effect on other New England railroads.

Strout noted that his company has been actively soliciting LCL traffic since 1954 despite a growing trend in the other direction. BAR adopted such devices as free pick-up and delivery with radio-dispatched trucks. When connecting railroads ceased handling small shipments, BAR published joint rates with truckers. But, said Strout, current projections offer no hope that "we would under any foreseeable circumstance bring the business into the black again."

rounding the bend to the future

Long lengths of welded CF&I rail—to cut costs and maintenance on mainlines today and for years to come. Helping railroads prepare for higher speeds and heavier loads by developing and producing premium quality rail products and developing new ones is CF&I's business. For example, CF&I cooperated with railroads to develop Hi-Si®, high silicon content rail that reduces wear caused by excessive wheel loads. Especially effective on curves and grades, Hi-Si extends the operating life of sections subjected to high stress from 50 to 100 percent. CF&I will continue working with progressive railroads throughout the nation to develop products like Hi-Si, new sections (136, 119 and 106 lb.), oxygen steel rail and a broad line of accessories—teamwork to meet the challenges of tomorrow. Sales offices nationwide. CF&I Steel Corporation, Denver, Colorado.

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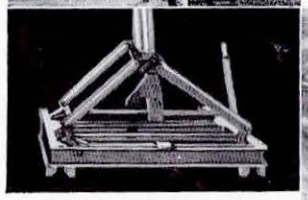
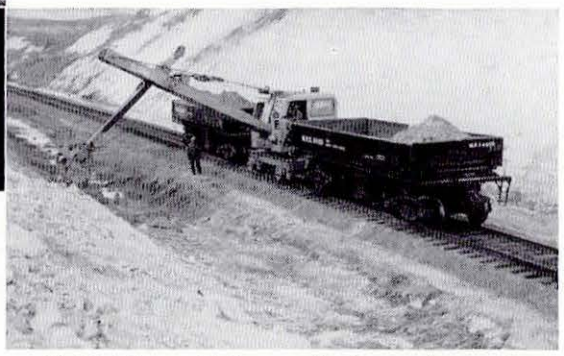
TIME SAVERS!

New Burro Multiple Rail Lifter handles up to 8 rails and more per lift.



This Model 40 Burro Crane using a Burro Panel Track Lifter picked up and loaded 106 completely assembled, 39' panel sections in less than 200 minutes.

Burro Rail Threader provides fast, efficient handling of continuous welded rail.



Model 40 Burro Ditcher supplies its own locomotive travel and work power. Ditcher loads the dump cars and furnishes necessary air for dumping.

Model 40 Burro, equipped with automatic folding leads, shown driving piles with a diesel pile hammer.

Rugged and versatile, Burro Cranes and Equipment get the job done fast and efficiently, on the line, in the yards or Stores Department. Burro takes any job in stride. Pile driving, ditching, handling welded rail, multiple rail or panel track lifts is done quickly and economically. Pound for pound, there's more work power and versatility built into BURRO Cranes than any other unit.

Write for complete information and new Burro Crane Bulletin No. 162.

C-F

CULLEN-FRIESTEDT COMPANY
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What's more, when you lease instead of building your own, you'll have your capital right where you need it.

In your own hands.

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We'll take over those problems.

So you concentrate on what you do best.

Making and selling your product.

And GATX, the lessor of major industrial and transportation equipment, will concentrate on what it does best.

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Let's get together and put a lid on the deal.

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GENERAL AMERICAN TRANSPORTATION CORPORATION

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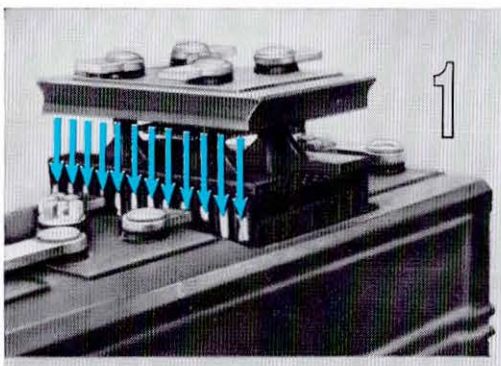
One of America's Leading Railroads, at our invitation, returned one of their in-service RAIL TITAN DIESEL BATTERIES for a checkup and diagnostic report.

the findings:

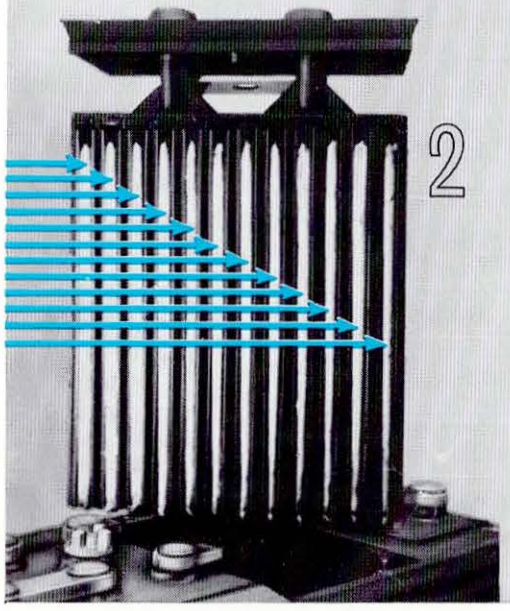
"After 2½ Years - It's ALL IN THE BAG"

"with everything else exceptional, too!"

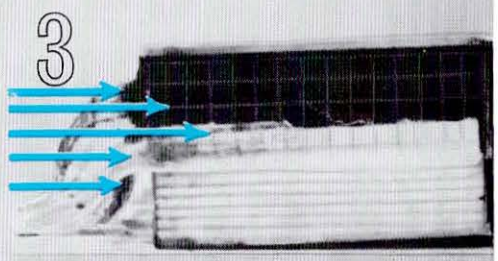


1. First view of Rail Titan's Dynell Bag is seen here as the plate group is being removed from the case. Purpose of the Dynell Bag is to provide an extra guard against the shedding of active material, which after leaving the wraps in conventionally designed batteries, is free to drop to the floor of the battery where eventual buildup can reach the plates to shorten life.

2. After complete removal, inspection (see photo) shows all Dynell Bags are intact. No material has escaped.



3. With the Dynell Bag opened, the exceptional ability of the exclusive, vertically wrapped, Retent-A-Tape to hold the positive active material in place is revealed. The tape is found to be imbedded into the active material of the plate. Dark areas at left show how active material clings to the tape as it is stripped from the plate.



Test Results Highlights

a. Three hour capacity: excellent. A yield of 105% of rating when discharged. (353 ampere hours)

b. Eight hour capacity: above specification. A yield of 107% above rating. (455 ampere hours)

c. Starting voltages at 2,000 and 2,680 amperes discharge at five seconds, averaged 1.26 and 1.08 volts per cell respectively. These values meet or exceed our standards for new cells. (1.26 and 1.02 volts)

SPECIAL TAPERED GRID PLATE
SPECIAL INTERLOCK GRID
ADVANCED MICRONIC BALL MILL OXIDE
EXCLUSIVE RETENT-A-TAPE VERTICAL WRAP
SPECIAL JACK STRAW PATTERN WRAPPER
SPECIAL FIBRE GLASS EXPANSION MAT
RAIL TITAN
EXCLUSIVE ESCAPE GUARD DYNELL BAG

THE ESCAPE GUARD DYNELL BAG typifies the extra care taken in the Rail Titan battery to insure longer life . . . and exceptional electrical performance.

This exclusive bag construction provides an important, additional safeguard . . . an extra seal . . . never before available in a diesel engine battery.

Now . . . 3 years later . . . engineering analyses continue to confirm that Rail Titan's exclusive Dynell Bag keeps all the shedded material in the **bag.** This Dynell Bag and the exclusive Retent-A-Tape and other special wraps, are providing the most completely effective protection ever afforded the positive plate in a diesel engine battery.

Rail Titan electrical performance is exceptional, too . . . so, also, is its written warranty of special performance.

RAIL TITAN DIESEL ENGINE BATTERY

B-265

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POOR & COMPANY

RAILWAY PRODUCTS DIVISION

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We make signal and control systems . . . so why should we have a chem lab?

Because we're very fussy.

Suppose you bought a GRS item with poor paint, or with peeling plating.

Sure, we'd repaint it, replate it, or replace it . . . and we'd lose money on it—and maybe lose a friend too.

We hate to lose money—or friends either. So we make it just as good as possible the first time—with materials that meet specs and with inspection that really inspects.

This lab is just a part of the investment we have in GRS quality insurance—for you.

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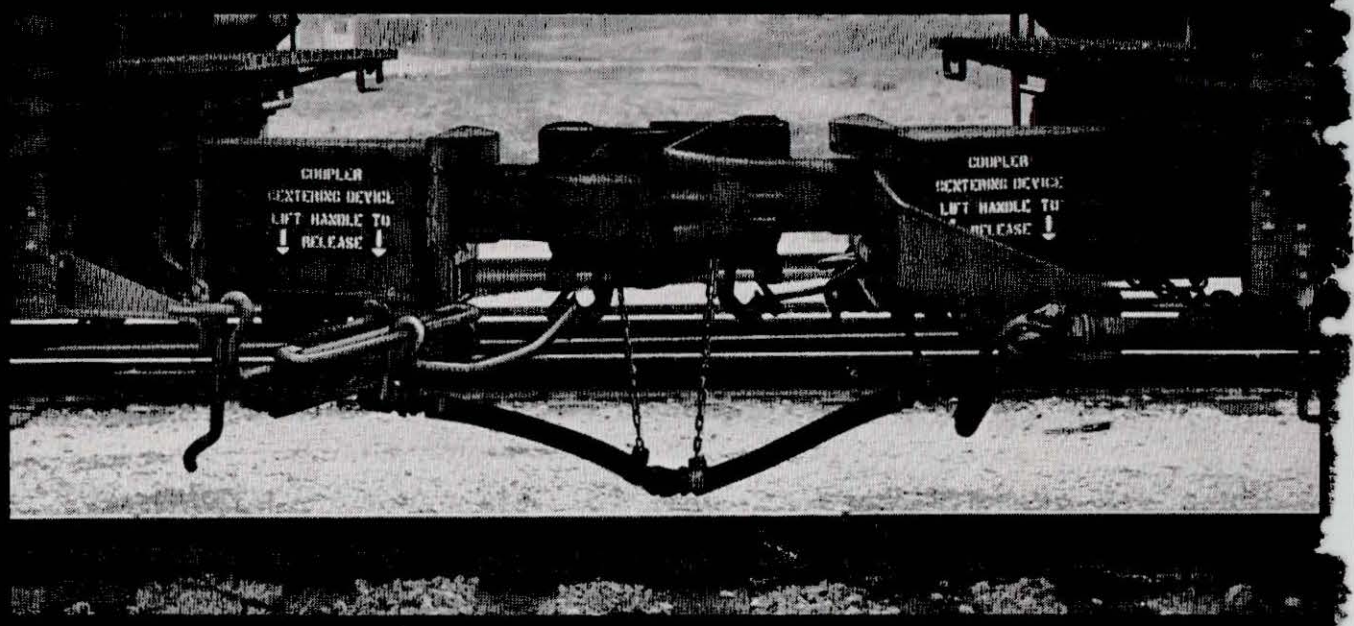
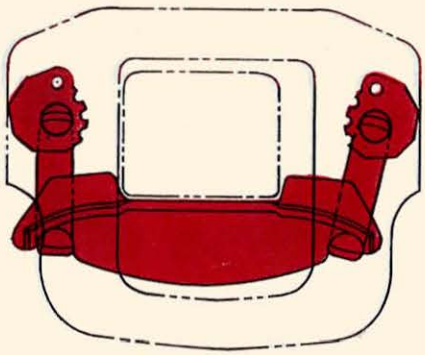


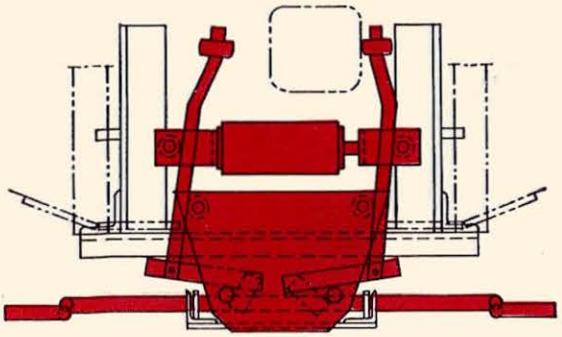
Reduce car damage with these Standard Coupler Centering Devices

By keeping a free coupler centered in relation to the end sill, they minimize the damage brought on by the passing of couplers.

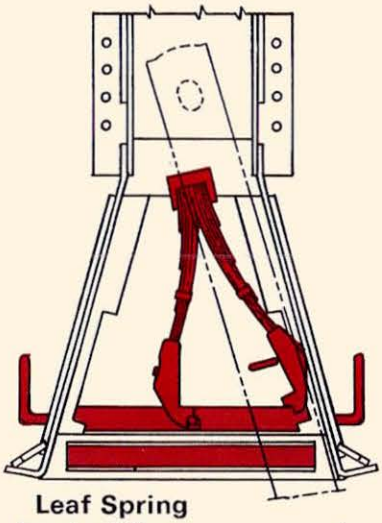
A Complete Family of Standard Centering Devices to Meet All Car Conditions



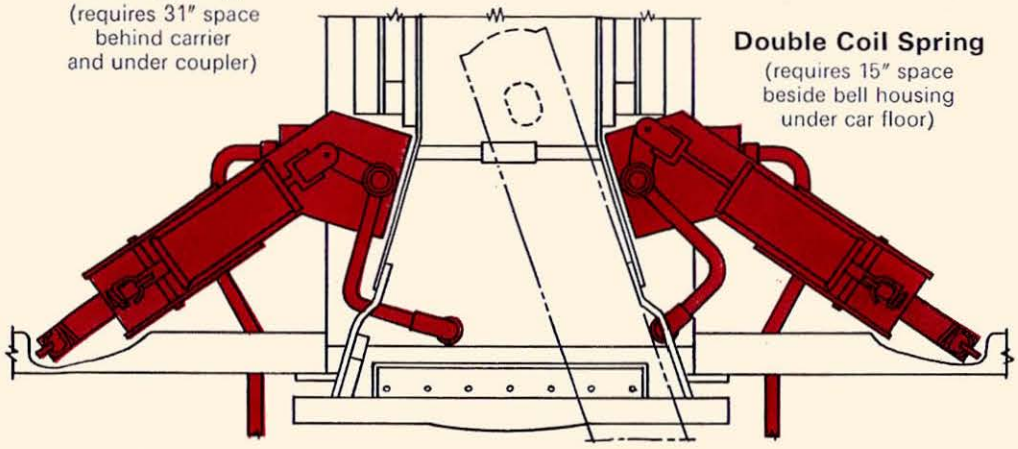
Swing Type
(includes carrier)



Single Coil Spring
(requires 6" space
behind carrier and under coupler)



Leaf Spring
(requires 31" space
behind carrier
and under coupler)



Double Coil Spring
(requires 15" space
beside bell housing
under car floor)

Today's longer freight cars, with their long-shank couplers and wide-opening strikers, have required new centering device designs to meet the many car conditions. These new designs afford the same protection from damage that the Standard Centering Device has provided for many years—protection that is even more important with today's wide-swing couplers.

With a Standard Coupler Centering Device, the risk of passing couplers is reduced to a minimum. The device keeps a free coupler centered in relation to the end sill. If the coupler is swung wide when disengaged from another, the device instantly returns it to center position.

When the coupler is coupled to another car, the centering device permits all movements essential to safe operation . . . sideways, and up and down.

In using a wide-swing coupler device, there will be occasions when coupler alignment requires that a free coupler be moved off center. If so, a pull on the handle releases the centering device. As the cars move, and the coupler returns to center position, the device automatically re-engages.

Standard Coupler Centering Devices are supplied in four to six components, together with all necessary hardware and simple instructions for installing.

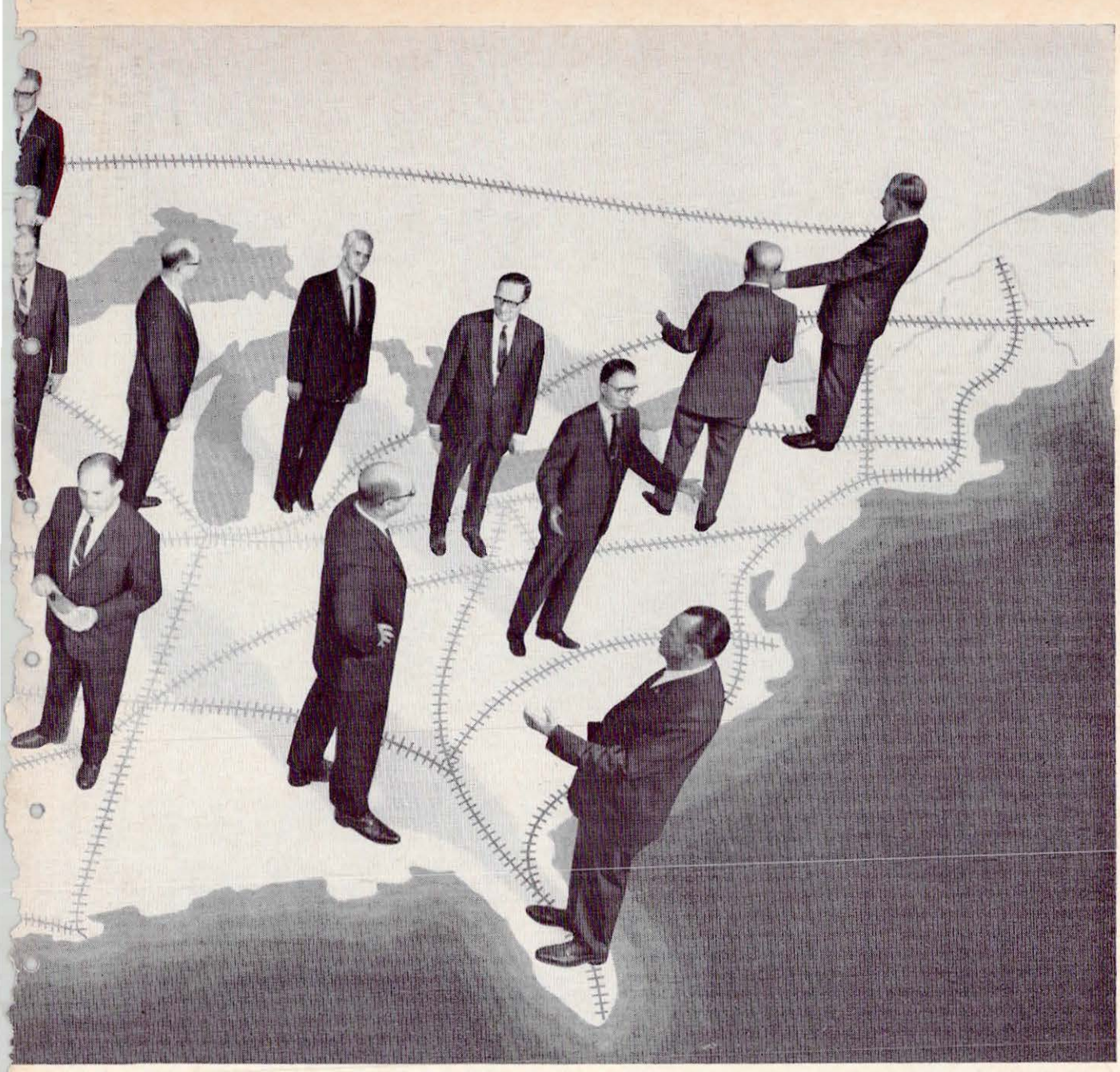
The choice of designs will hinge upon your particular application. Your Standard representative will be glad to recommend the best choice for the job at hand—and to answer any questions you may have.

STANDARD RAILWAY EQUIPMENT
division of STANRAY CORPORATION
Hammond, Indiana • Chicago

MEMBER RPI RAILWAY PROGRESS INSTITUTE

Circle 13 on coupon page 34

No railroad map is complete withou



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rouble before it starts. They work with your shop or yard personnel in the care,
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And for any bearing questions they can't answer, we have an experienced group
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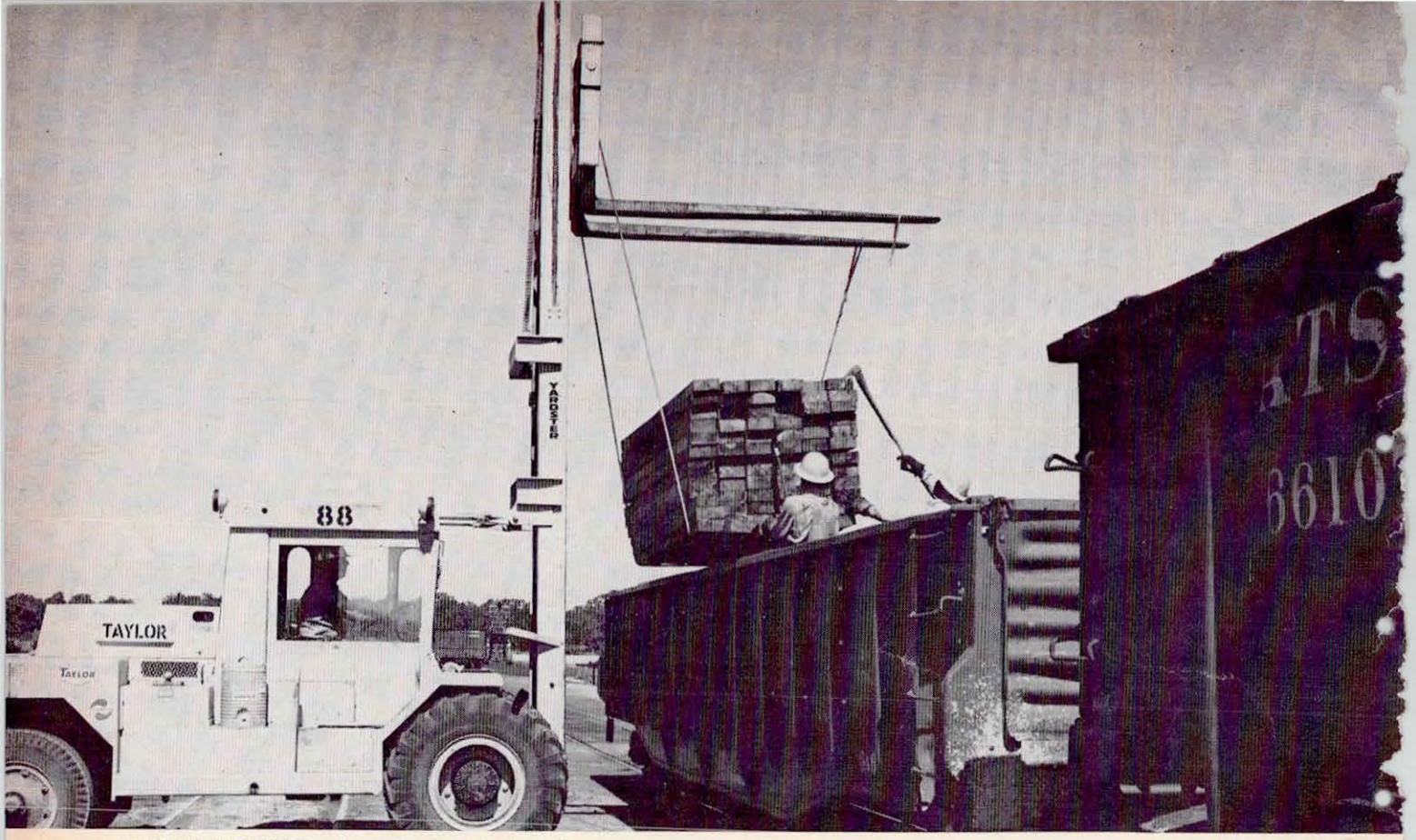
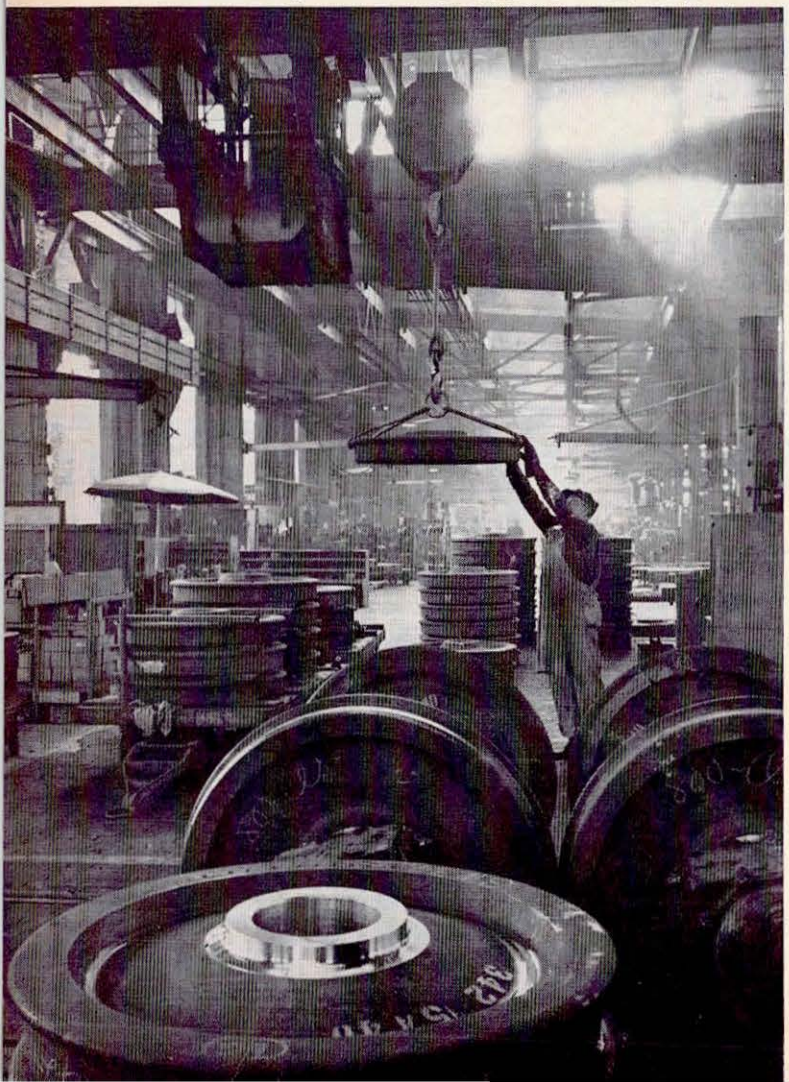
TAPERED ROLLER BEARINGS

Circle 14 on coupon page 34



FORK-LIFT TRUCKS play a basic role in railroad material handling operations. Here, one takes care of a load of lumber.

MECHANIZED PARTS HANDLING is a big key to efficiency and cost-cutting skill of this Santa Fe wheel shop.



Railroads get a hand from materials handling gear

DIESEL ENGINES of Santa Fe mechanical refrigerator cars are

Rail managers can look with pride at the rapidly evolving roster of railroad cars designed to meet the evolving needs of the transport market. Good examples on that roster are the high-cube box car, the covered hopper car and the stretchable tank car.

But what about meeting the railroads' own transport needs? What about equipment to distribute the materials that railroads need to build, maintain, improve and operate the super-freight-car roster?

● **An unceasing stream.** Ranging from a rail spike weighing less than one pound to a 57,000-pound engine for a diesel locomotive, material pours into railroad shops and storehouses in a constant stream. It has to be moved to the using departments—and by them, after they have it—with the greatest possible saving of time, space, men and money.

Consequently, such vehicles as rubber-tired fork-lift trucks have found a lasting home on railroad equipment rosters. Together with various other material handling machinery types, they are helping various railroad departments in promoting smooth-running operations.

These departments use MH equipment in many ways. Fork-lift trucks, for example, move and stack shipments in freight houses; they sort rail material in railroad storehouses. In car and locomotive shops, cranes move entire car and engine bodies and motors as well as parts for them. Cranes of lighter weight load and unload ties, rail and other track materials for maintenance-of-way personnel. And, of course, there are fleets of highway trucks to move material from one shop to another or from one store to another.

● **Why machinery?** The variety of equipment available gives stores men the chance to choose the equipment type that best fits their needs. The result comes in the area of distribution time and cost, and in stores space usage. It can be summed up like this:

Material handling equipment cuts the time, force and cost involved in storing material. At the same time it makes materials-moving easier, and brings more efficient use of space.

One railroad stores manager says "MH equipment has enabled us to better utilize the available cubic storage space and has reduced floor-area requirements. Any reduction in area produces a saving of distance which must be traveled and a corresponding reduction in labor."

● **What railroads have.** Here is a list of some of the MH equipment now in use on railroads:

—A flock of fork-lift trucks with attachments such as clamps, barrels, rods and teeth.

—Pallet caddies for unloading pallets from open-top equipment.

—Overhead cranes for loading and unloading material in storage areas and then delivering it to fabricating shops.

—An automatic car wheel unloading device that systematically unloads one pair of wheels at a time and puts them on a nearby conveyor.

—Wheel-loading cranes capable of handling three pairs of wheels at once.

—Car-door openers and closers for use on forklifts.

—Removable wheel racks for moving mounted wheels on a flat-bed trailer, with a capacity of seven pairs of wheels.

—Side-lift attachments for fork lifts for placing pallet loads against the wall of a truck van.

● **What stores men want.** In addition to dependability and availability of local service for equipment, rail stores men look at factors related to their own company. One rail stores manager suggests that the following be considered in the selection of equipment:

—Survey of the operation involved.

—Commodities to be handled.

—Plant facilities where material is to be handled with regard for ceiling height, floor or road surface and operating space.

—Distance between loading and unloading locations.

—What the volume is.

—Availability of repair parts, maintenance and overhaul service.

—Equipment versatility, durability, safety features, capacity and storage requirements.

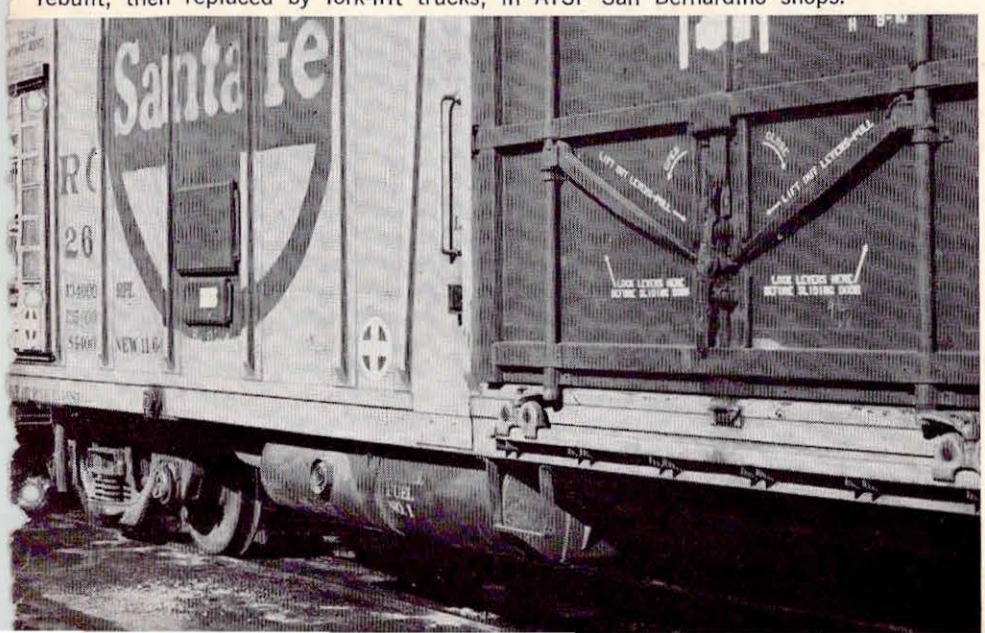
● **Packaging helps, too.** Have new packaging methods affected handling and distribution methods? Yes, for the general reason that receipt of materials in standard-quantity and sized packages, pallets or pallet containers gives better use of equipment. It also promotes purchase and issuance of material in standard-package quantities.

Some other packaging benefits are man-hour reduction, improved handling safety, reduction of re-packaging for distribution, streamlined housekeeping, materials protection and assistance in receipting, recording and inventory.

● **Big MH market.** According to a spokesman for the Material Handling Institute, Inc., the transportation industry ranks close to the top as a market for MH equipment. A breakdown of sales volume according to industry or mode is not available. However, the reported dollar volume for the entire MH market for February 1968 was $91 million. This is nearly $4 million ahead of the February 1967 figure. Bookings are expected to stay above average during March and April, which usually are the best order months. This follows a normal seasonal pattern for the industry, MHI says. Bookings for the full year of 1967 totalled $1.17 billion, for the third straight year of $1-billion-plus ordering.

The Santa Fe's approach ►

rebuilt, then replaced by fork-lift trucks, in ATSF San Bernardino shops.



MATERIALS HANDLING

Hand power out, machine power in, on the Santa Fe

Use of modern machinery cuts costs and increases efficiency.

DIESEL OVERHAULS proceed faster because of Santa Fe's mechanized procedures.

Whatever happened to the two-wheeled hand truck? For material handling on the railroads, the vehicle used to be as common as the pick and shovel were for maintenance-of-way work. However, on most railroads the hand truck has become obsolete. And on Santa Fe, for example, there may be a few of the human-power trucks hidden away in some warehouse corner, but generally they're hard to find.

Does that mean that hand power is out, too? Ask Frank J. Steinberger, Santa Fe vice president and general purchasing agent if any material still is moved by hand. He answers: "Not on the Santa Fe."

If hand power is out, machine power is in. On Santa Fe, the machinery falls into three general categories. First, there is the hand truck's replacement, the fork-lift truck. After that, various types and sizes of cranes and a fleet of highway trucks. This material-handling equipment ranges in size from 4,000-pound fork-lift trucks to 125-ton cranes.

● **Many sizes, many types.** Steinberger says there are still a few older 2,000-pound fork lifts around, but they are in corners, too, because most jobs have become too big for them. At the other end of the weight scale are fork-lift trucks with a capacity of 15,000 pounds, and there are many in between.

As they vary in weight, so do Santa Fe's fork lifts differ in type. For example, there's one model fitted with a single steel rod, commonly called a "ram," instead of the conventional forks. This model is used to transport steel car wheels—as many as five at one time. Wheels are delivered in box cars loaded in an upright position. After the door is opened, the ram is simply inserted through the wheel's axle holes, a lift is made, and they're on the way to stock location. The same fork lift moves them from stock to assembly line or rip track as needed.

At its Newton, Kans., rail mill, Santa Fe has an entirely different type of materials-handling arrangement, utilizing conveyor belts. Newton is the headquarters for track and fittings for the entire system. On track relay jobs, used fittings are loaded aboard gondola cars at the site by a burrow-crane equipped with a magnet. They are shipped to Newton, where a similar crane unloads the material, funneling it through a hopper onto a 200-foot-long conveyor belt. Workmen located at various stations along the belt sort the tie plates, angle bars, spikes, bolts, nuts, washers, studs and rail anchors, either classifying material as reusable or scrap. Reusable material may be shunted directly to another conveyor feeding into an outbound car, if an order for the particular type of material is currently being filled, or else it will move to inventory location. Scrap is conveyed to other cars and shipped to salvage dealers. More than 120 tons of track material are sorted every day at Newton.

● **Benefits add up.** What are Santa Fe's reasons for utilizing modern material-handling machinery? The same as those of other railroads—to reduce handling costs and increase efficiency of operations in all departments using such equipment.

Currently ATSF's material-handling-equipment roster includes 780 highway motor trucks, 204 fork lifts of various types and 85 cranes, with a combined value of about $7.5 million. Santa Fe spends close to $750,000 annually for new material-handling equipment, to ensure that its fleet remains modern and capable of meeting current requirements.

Is there much activity by MH equipment suppliers to stay ahead of the railroads' replacement needs? Plenty, according to Steinberger, who says that suppliers are "always around." They're scouting railroad property constantly for opportunities to expand the use of their machinery, and to look for chances for innovation. "While we are pretty well satisfied with the equipment we now have, we are always searching for better ways of doing things and we welcome the suggestions of suppliers," Steinberger says.

For MH manufacturers there is still

BIG SHOW COMING UP

The 1968 National Material Handling show that starts May 13 in Philadelphia is expected to come off as the biggest such trade show since 1959. More than 210 companies are showing their products at the Philadelphia Civic Center through May 16. More than 20,000 management and engineering officers will be there.

In addition to exhibits, the show features a special "Idea Center," which is a gallery of several thousand photos illustrating the applications of material-handling systems. There is a workshop-clinic on May 13. And a seminar on international material management will run May 14 through May 16.

The exhibits cover more than 125,000 square feet in the Center. MH companies are unveiling "the most significant advances in material-handling equipment and systems of the past decade," says J. West Shea, MH Institute, Inc., managing director.

a good-sized railroad market, according to Steinberger: "On the railroad we demand more service than any other industry. We're very highly mechanized, especially in stores, maintenance-of-way, mechanical and freight-handling. We have to remain constantly alert for new, improved methods with today's high labor costs, and any manufacturer able to demonstrate that his equipment will increase efficiency will find a receptive market."

● **"Standardized" deliveries.** To better coordinate handling of supplies, Santa Fe requests that material be shipped on standard-size pallets right from the suppliers. This enables mechanized handling by fork-lift trucks on receipt without wasted manpower. Additionally, many materials can be stacked right on the pallets, saving warehouse space. "This is an extremely important element in our pursuit of MH practices that save time, money and space," Steinberger says.

A prime example of another type of efficient material handling can be found in Santa Fe's shuttle run between San Bernardino and Barstow, Calif. At San Bernardino, Santa Fe has a highly-efficient assembly line for rebuilding traction motors for diesel locomotives. At about 4:30 a.m. on every working day, a truck tractor hitches on to a special trailer at San Bernardino, loaded during the night with six traction motors, each weighing about 6,700 pounds. The driver makes the 70-mile run over the mountains to the diesel shop at Barstow, where the motors are to be used, unhooks his trailer, hitches up to a second trailer loaded with six motors due for rebuilding, and is back at San Bernardino by 9:30 a.m. Later in the day, that same tractor makes another round trip, carrying supplies of all types to Barstow, and returning with various kinds of material.

There are other examples of use of over-the-road trucks for short hauls, thus increasing efficiency, reducing inventory requirements and lowering rail operating costs, as between the storehouse at Topeka, Kans., and Argentine (Kansas City), for instance. Argentine is the second-largest repair shop on the system. A truck from Topeka will carry all types of supplies on the going trip. On the return it may carry items purchased in the Kansas City area, such as hardware, or it may carry items needing repair at the Topeka shops.

● **One place for a hand-truck. . .** Over-all, it's a machine-power-instead-of-manpower operation. And perhaps epitomizing the complete turn away from "manhandling" material is a recent Steinberger decision: He sent out word to locate one of the old two-wheeled hand trucks for a planned Santa Fe museum. ■

LUTHER MILLER

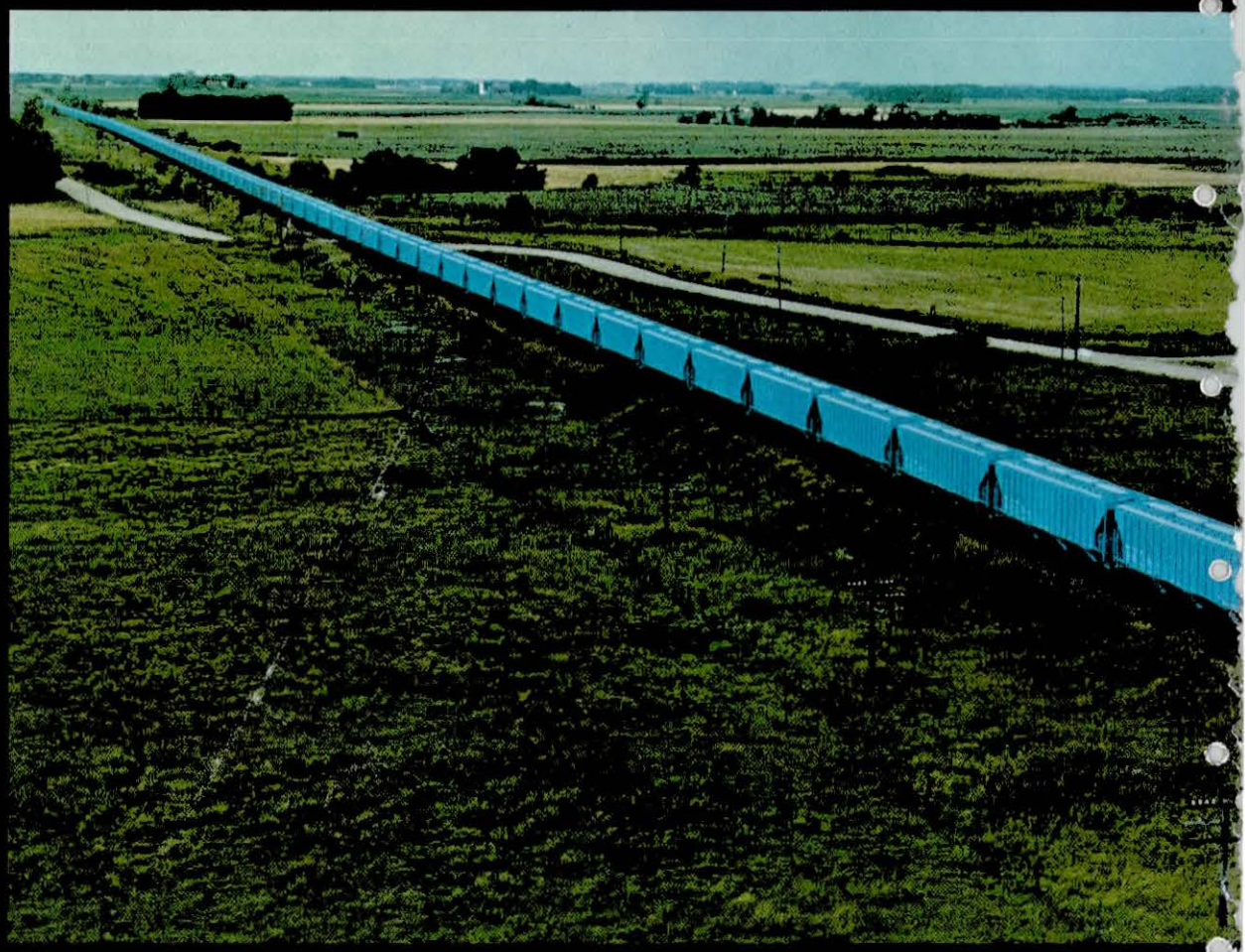
AS THE EDITOR SEES IT

ARAM'S DOLLAR-STRETCHERS—The Association of Railroad Advertising Managers is meeting this week in St. Louis—and if past experience is any indication, a stimulating time will be had by all. These are the idea men of our industry; and their sessions are rarely dull. There is, in fact, just one thing wrong with these great guys from ARAM: they can't really work miracles (although a lot of them seem to). They can stretch their dollars only so far. And the supply of dollars continues to shrink. Idea men? Yes. But what good is an idea if you can't sell it to management?

WHY NOT BRING THE BOSS? — Maybe the right people don't come to these meetings—that is, not *all* of the right people. Maybe if the boss himself came, the news that ARAM will hear at St. Louis this week would sink in where it could do some good. That news is this: The railroad industry's advertising outlays have taken another tumble—from 1966's $18.9 million (which most of us thought was rock bottom) to $17.9 million in 1967.

NO TIME FOR SALES LETUP—If the boss could spend three whole days grappling with this single aspect of his business, he might begin to wonder if railroads were really wise—at a time when they should have been selling harder than ever—to weaken the selling tool that most modern managers feel is an essential (not merely desirable) part of any salesman's kit. He might begin to doubt whether it really makes sense—when you're hollering louder than ever over the failure of the public to understand what railroading is really all about—to whack away at that one budget item which, with all of its shortcomings, is still the best way modern man has devised to try to buy understanding.

THE HONOR ROLL—This not to suggest that all railroads are laggard in beating the drums for steel-on-steel. Enough railroads are doing a comparatively good job (the IC, KCS, MP, Reading SCL, SP, Southern, Santa Fe, L&N, Katy, CB&Q, D&RGW, UP, come immediately to mind) to suggest the impact that an industry-wide effort could have. But the honor roll is not big enough to keep the class from flunking. As long as the airlines continue to spend roughly 12 times as much on advertising (per $100 of gross) as the railroads, is it any wonder that most people continue to view them as tomorrow's transportation? And the truckers aren't idle. A trucking industry ad ("When is a Highway Vital?") ran in national media last week over the signature of the American Trucking Associations. It was small—but it was there. When did you last see an AAR ad?

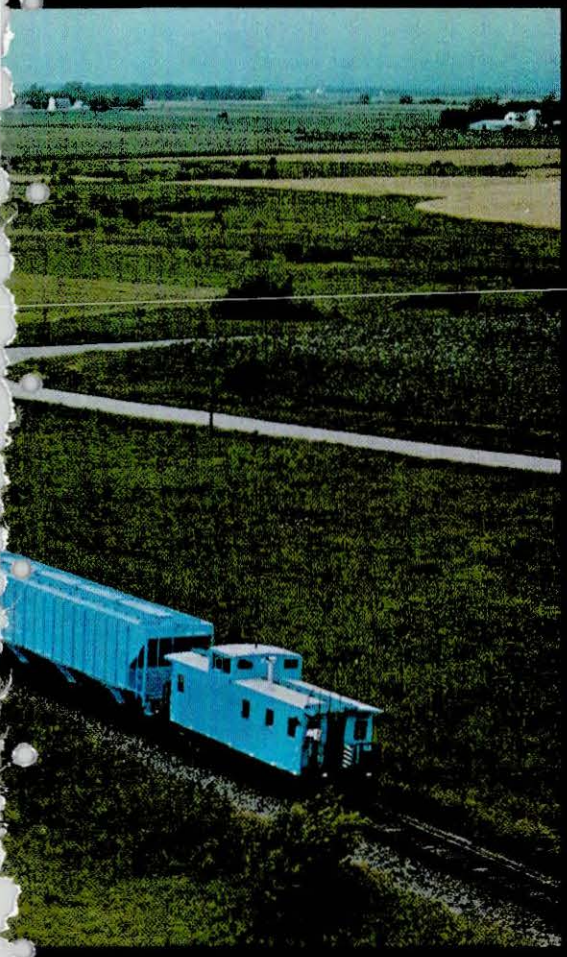


Every one of these covered hoppers is exactly the same.

Except one cost us $128,432.78.

That's many times what the production model costs you.

But, it takes a lot to come up with the single right answer like the versatile Pullman-Standard covered hopper car.



It takes an alert Industrial Marketing Department studying your problems, and your customers' problems.

That's only the beginning.

It takes imaginative Research and Engineering to come up with a solution. Experienced specialists to produce it. And trained Sales and Service engineers to follow through.

How do you protect your investment in railroading's future?

Work with someone like Pullman-Standard, who's invested, too.

Of course, there isn't any one else like Pullman-Standard.

Pullman-Standard
WORLD'S LARGEST RAIL CAR MAKER
200 South Michigan Avenue, Chicago, Illinois 60604

A Division of Pullman Incorporated

HEAVY GIRDERS on this Wabash River bridge were part of a $ 1-million job to provide capacity for today's bigger freight cars.

B&O improves its bridges

GIRDERS WEIGHED 135 tons. To handle each required two locomotive cranes.

Completion of upgrading project means that 100-ton loads can travel 95% of the system.

Installation of eight girders of record length marked the last link in a million-dollar bridge-improvement program undertaken by the Chesapeake & Ohio/Baltimore & Ohio. The project was adopted as the result of a Sales-Marketing study that indicated that shippers and receivers want and need bigger rail cars.

The basic objective of the bridge-improvement program was to provide adequate capacity for handling gross loads of 263,000 lb. With completion of the program, cars with 100-ton loads can now be hauled over 95% of the entire B&O system.

After a 1965 Sales-Marketing study showed a trend toward larger cars, the project was authorized to upgrade bridge capacities covering 425 miles of line in Indiana and Illinois. Thirty-nine bridges were either rebuilt or replaced on two of B&O's lines—one line west from Indianapolis, Ind., through Tuscola, Ill., to Springfield, Ill., the other south from Springfield to Shawneetown, Ill., on the Ohio River.

● **Project started in 1966.** The work began in 1966 when the road strengthened 12 wood-trestle structures and three steel bridges on the Indianapolis-Springfield line. In 1967, the work was continued on the structures south of Springfield on the line to Shawneetown. The last of the structures to be completed was bridge No. 165 at Montezuma, Ind., which carries the single-track line over the Wabash River. Its

(Continued on page 32)

In 1888, when Henry Villard, Northern Pacific Railroad president, heard of his employee Conductor Clark being intimidated by ruffians he exclaimed, "Confound it, that's no way to run a railroad!"
The American West, Lucius Beebe and Charles Clegg

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MEMBER RPI versatile aluminum

Circle 16 on coupon page 34

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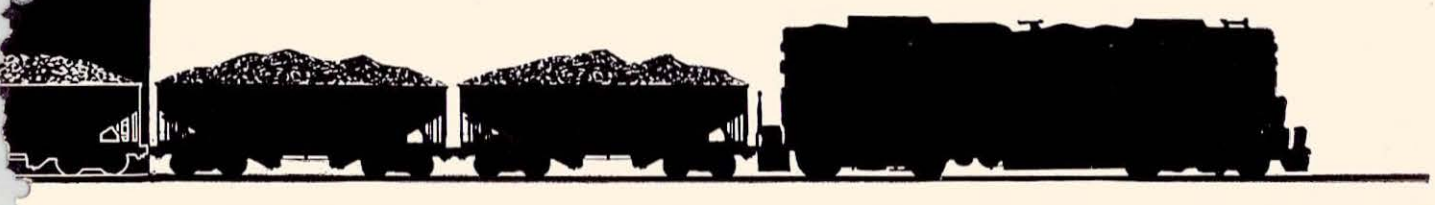


Barge lines want the railroads as "partners"

The barge lines have (they say) long look upon the truckers as their friends and business associates, now they have mounted a campaign to enlist the railroads as "willing partners" in the movement of traffic.

The aim of the program, as outlined by Floyd Blaske, chairman of American Commercial Lines, is "to appeal to the business of self-interest of shippers and railroads involved in particular movements of traffic." He said the objective is to promote the most efficient use of available transport resources.

"I would stress at the beginning," he added, "that we are not thinking in terms of a complaint before the Interstate Commerce Commission or a long excursion through the courts. We simply want a business answer to a business question why it would not make sense to coordinate rail and river service on this particular movement."

The first "particular movement" cited involves shipment of steel pipe from Pittsburgh to Texas for the oil industry. Blaske suggests a barge movement as far as Memphis, Tenn., and rail beyond to Odessa, Tex., which is typical of a number of such pipe storage points in Texas.

"The annual tonnage is in excess of 20,000 tons between Pittsburgh, Pa., and Odessa," he points out. "The present all-rail rate is $30.80 a ton, minimum weight 35 net tons.

"Our analysis shows a potential saving of $6.18 a net ton using barge as far as Memphis down the Ohio and Mississippi rivers and rail from Memphis to Odessa," he said. "If we multiply the annual volume of 20,000 tons times the $6.18 we arrive at an indicated saving of $123,000."

Blaske said that a Department of Commerce study last year "confirmed our own experience that there is 'marked reluctance' on the part of railroads to join with water carriers, despite the obvious public advantages."

The Water Transport Association, he said, is beginning to examine a series of case histories of various types of freight movements.

"We set aside for the purposes of our discussion the question of whether or not the railroads will cooperate. We assume that the rail carrier will be just as friendly a business 'willing partner' as a truck line."

• **Second case cited.** Blaske's second example involved the movement of salt from Avery Island, La., to Portage, Wis., via a transfer point at La Crosse, Wis., on the Mississippi.

"We are not dealing here with a high-rated commodity like steel pipe," he stated, "but with the traditional low rates associated with bulk commodities. From Weeks, La., the rate basing point, to Portage, Wis., is 1,125 miles. The total present rail rate is $12.50 a ton.

"Our proposal here is for a $2.44 per ton rate by rail for 110 miles of service from La Crosse, Wis. to Portage. This is a mileage pro-rate of the division the railroads receive for the 371 miles above St. Louis on this traffic. This is not an ideal way to develop a 'willing partner' relationship, but it is valid if special allowances are made for terminal costs." He reiterated his point that the water carriers "are not proposing to take the railroads to court over these examples. We simply want to start a meaningful dialogue with them on particular movements."

He said that in the case of the salt movement, barge-rail service would save $2.20 per ton from the present per ton shipping cost of $12.50. Charges per ton would be $5.11 for the barge rate from Avery Island to La Crosse (at 3/10th of a cent per mile); transfer cost, barge to rail at La Crosse of $.75; extra rail terminal allowance and car spotting cost, $2.00; and the La Crosse to Portage rail rate, $2.44. With the annual volume of 90,000 tons, annual transportation savings would be $198,000, he said.

Blaske stressed that the indicated saving need not necessarily accrue entirely to the shipper. "Please note that I do not say saving to the shipper. It may well be, on some of these movements, that the right economic decision is to share these savings between the shipper and the connecting railroad."

He pointed out that these calculations are made assuming normal "arms-length" business relationships.

"Let us suppose, however, that a particular railroad marketing division were to become interested in the potential of these very low barge charges. Let us suppose that a particular railroad were to begin to consider what could be done if the best efficiencies of railroading, the best efficiencies of terminalling and of barging were to be joined together."

Blaske said that the Water Transport Association, the industry trade group of the ICC-certificated domestic water carriers, is planning to release more case histories as they are developed. ■

B&O upgrades its bridges

(*Continued from page 28*)

completion permits movement of chemicals in jumbo tank cars, with capacities of 30,000 gallons, from chemical plants on the Indianapolis-Springfield line.

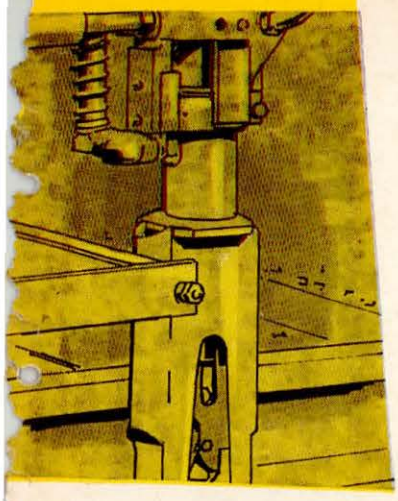
Bridge No. 165 was the longest and most difficult to upgrade in the program. The work done on this structure alone cost $800,000. Built in 1898, the original bridge was comprised of a drawspan 153 feet 8 inches long, flanked on the east by three pin-connected through-truss steel spans and on the west by another pin-connected through-truss span. When navigation on the river at this location stopped in 1912, the drawspan was replaced with a riveted through-truss fixed span. This span is designed heavy enough to handle the 100-ton loads without need for strengthening.

• **Longest girders.** The four 70-year-old truss spans were considered too light for handling the heavier loads to which they would be subjected. It was decided to replace them with through-girder steel spans. Carrying out this decision resulted in the erection of what the railroad claims to be the longest through-girder spans in railroad use in the United States. The shortest span is 166 feet 4¾ inches long (in itself a record length) and the longest is 167 feet 9 inches long. The depth of the span is 12 feet 6 1/2 inches.

The fabrication and erection of the four new spans were carried out under contract by the Bethlehem Steel Corp. Being long and heavy, each girder was shipped by the B&O in two parts. One part, about three-quarters of the total length, weighed 90 tons, and the other part weighed about 35 tons. The parts were unloaded in the yard at Montezuma and field riveted together.

Erection work started in September 1967, was completed in April 1968. In general, the contractor had unrestricted use of the track from 8 a.m. until 5:30 p.m. The work procedure included driving false-work bents under the trusses, transferring track and truss loads to the falsework, dismantling the trusses, erecting the new girders and, finally, replacing the old floor system with the new. The new girders were placed on the old piers which had been provided with new bearing shoes. The floor system was restored at the end of each day's work to permit four scheduled manifest trains to use the bridge during the night. ■

1 PULLING OLD SPIKES



2 CUTTING OLD TIES

3 SCARIFYING / INSERTING NEW TIES

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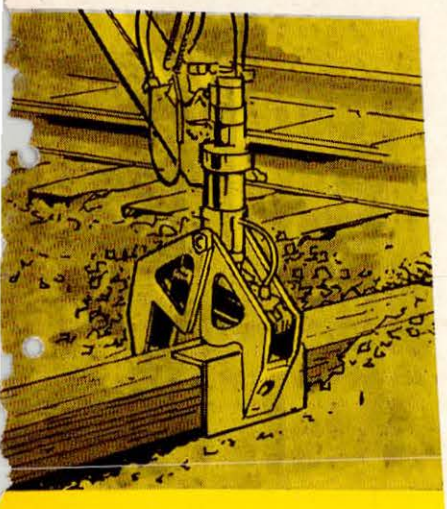
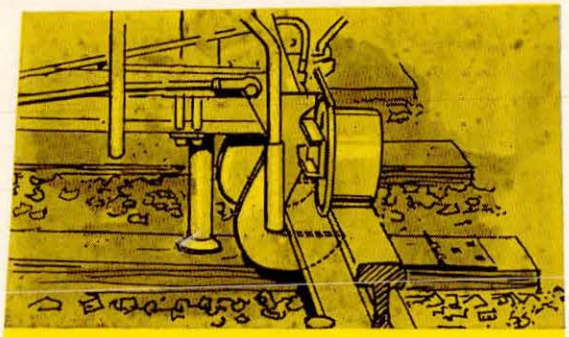
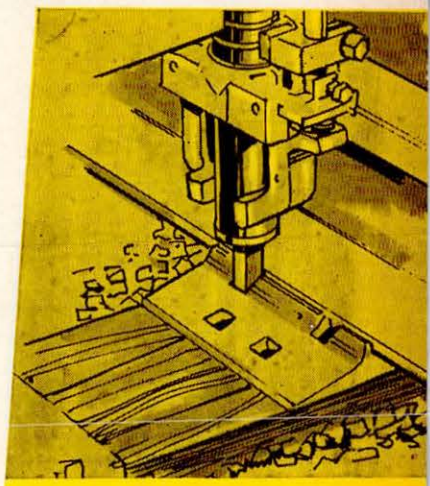


4 HANDLING OLD & NEW TIES



5 PLACING TIE PLATES



6 DRIVING NEW SPIKES

Mechanization of railway track maintenance work is most efficient when men and machines are *organized* to keep work productivity up and costs down. Good example of *organized mechanization* is the group of six "Mechanical Muscles" that form the Nordberg Tie Gang to expertly handle a wide range of tie renewal jobs for the world's leading railways.

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MECHANICAL MUSCLES

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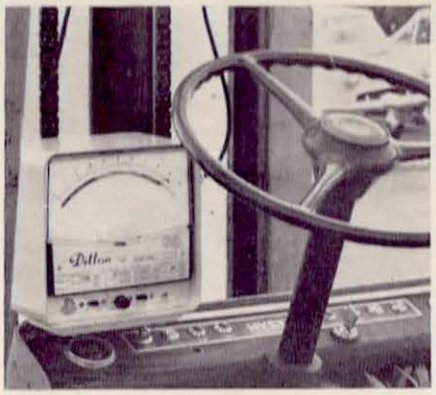
R288

Circle 18 on coupon page 34

NEW PRODUCTS REPORT

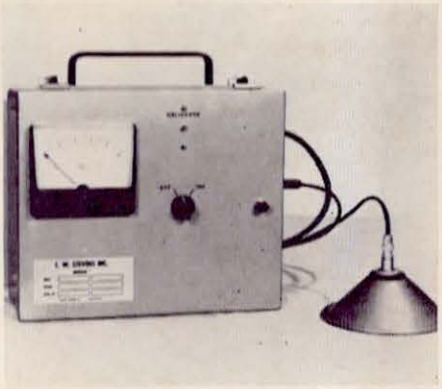
On/off-track tamper (RA-1)

Rubber-tired off-tracking equipment for the Switch Electromatic tamper and the Junior Electromatic tamper has been developed. The up-and-down feed of the off-track wheels, as well as their drive, is completely hydraulic. The machine is said to travel on highways as well as on rough terrain at speeds up to 20 mph. Maintenance is reduced, it is claimed, by the rugged design and the use of standard commercially available components. *Tamper Inc.*



Weighing system (RA-2)

Tension-calibrated load cells in the on-the-run Electronic Lift Truck Weighing System "have a weighing capacity equal to truck's lifting ability." Load cell capacities range from 800 to 50,000 lb. Either fork is capable of weighing entire load. Even greatly out-of-balance loads can be picked up and accurately tallied, according to manufacturer. Readings, in pounds, are instantaneous on Type A Readout indicator mounted on lift-truck dash. *W. C. Dillon.*



Level measuring (RA-3)

Minimum sensing depth of Sonargage continuous level measuring systems for bulk materials has been lowered from 3 to 6 ft with the Model 2100 transducer. Instrumentation employs this new ultrasonic sensor head and a measuring instrument mounted in a NEMA 1, 4, 9 or 12 case connected by cable. The head has a range of from 2 to 25 ft when measuring powdered materials; from 2 to 50 ft for most liquids. *C. W. Stevens, Inc.*

Spike driver (RA-4)

The tie nippers on Tamper's hydaulic spike driver have been completely redesigned. The machine now includes a center turntable jack as standard equipment. The new-style nippers are said to be fast-acting and to lift and hold the tie firmly from the sides. This is claimed to be of special value when spiking through switches and turnouts. The manufacturer states that the nippers work within regulation clearance at all times. The center turntable jack permits the unit to be turned in one minute for reversing direction and for setting it off the track.

The spike driver drives a spike in less than one second, travels under its own power at 10 mph, and drives spikes on both sides of either rail. It is pointed out that operator fatigue is reduced by the power uplift on the hammer, making it unnecessary for the operator to carry any of the load of the driving hammer.

The machine is available in two models: Model DMNT, equipped with nippers; and Model DMT, without nippers. *Tamper, Inc.*

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Circle 19 on coupon page 34

from Marquardt Industrial Products...

RAILROAD COMMUNICATIONS CONTROL SYSTEMS

MIPCO's Chicago Division introduces a new station selection tone control system for train-to-wayside radio equipment as part of its expanding lines of railroad communications control products. MIPCO products range from specialized modular equipment to completely integrated communications systems—meeting the highly diverse and complex control requirements for modern railroad and transit facilities.

MIPCO COMMUNICATIONS PRODUCT LINES

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Circle 20 on coupon page 34

IC chief sees huge growth for transport

There are three certainties about transportation in the future, according to William B. Johnson, president of the Illinois Central.

The certainties are that transportation will be much more in demand; that it will be different, and better.

The IC chief executive made his forecast in an address at a University of Alabama Transportation Forum in Tuscaloosa.

"If per-capita consumption of transportation increases over the next 30 years at the same rate it has increased over the past 30 years," Johnson told his audience, "the role of the carriers by 1998 will be to annually provide about 20,000 ton-miles per capita. Demographers are talking about a U.S. population of 300 to 350 million by 1998. Thus, even if per-capita consumption of transport does not increase beyond today's level, the transportation industry will have to handle more than three trillion ton-miles by then, about double today's level.

"However, should per-capita transport consumption increase at the same rate in the next 30 years as in the past 30 years, the transportation industry will have to face demands for more than seven trillion ton-miles—and, by the way, the demands for personal mobility by individual Americans are increasing at a faster rate than the demands for the movement of things."

Present rail, waterway, pipeline and air systems are quite incapable of handling the tonnages that will need to be moved in the future, Johnson added. Enormous investments will have to be made to provide the expansions in capacity that will be needed.

"Railroads are the one transport mode that possesses readily expandable capacity," the IC officer pointed out. "For a relatively modest investment, in a comparatively short time, railroads could carry three times the traffic they presently carry. For a somewhat more substantial investment, railroads could carry a lot more than that."

Transport systems that lend themselves to automation—pipelines and railroads—will become the focus for future research and development work similar in magnitude to that which has been conducted for highway and air modes in recent decades, Johnson prophesied. ■

WALTER TAFT

WATCHING WASHINGTON

OGDEN GATEWAY NOW WIDE OPEN—The Ogden, Utah, gateway is now wide open after 45 years. That's the effect of the United States Supreme Court's order (RA, May 6, p. 11) upholding the lower court ruling in a case involving Rio Grande's successful assault on a 1923 decision of the ICC. That decision required the Southern Pacific to solicit traffic on a preferential basis for movement over its joint route with the Union Pacific through Ogden.

A CONTROL CONDITION—This requirement was one of several conditions under which the Commission approved SP's control of Central Pacific. Its purpose was to prevent diversion of traffic from the Overland Route to SP's own southern route via El Paso, Tex.

SAVED BY THE 1920 ACT—SP's acquisition of CP had already been condemned by the Supreme Court as a violation of the anti-trust law, but the Transportation Act of 1920 gave the Commission jurisdiction before that ruling ran its course to a divestiture requirement. Pertinent provisions of the 1920 Act were those granting anti-trust immunity for railroad acquisitions and mergers approved by the Commission. Availing itself of that out, SP applied to the Commission for approval of its control of CP. Approval came in 1923, subject to several conditions, including the Overland-Route protector.

TIMES CHANGED—Rio Grande was a party to the 1923 case, and did not then oppose the condition. It adhered to that position for 34 years, but then filed (in 1957) a petition for modification of the condition. The petition relied principally on a showing that the improvement and shortening of Rio Grande's Denver-Ogden line gave it a competitive position it did not have 34 years earlier.

DECADE OF LITIGATION—Reconsideration of the case then went on for more than 10 years. First came a 1962 Commission decision which refused to modify the condition. This was appealed by Rio Grande, and the courts sent the case back. The Commission then reversed itself (in 1966) to grant the Rio Grande petition. So the preferential-solicitation condition no longer refers to the SP-UP route—it is generalized to provide protection for all routes through Ogden. Also, the Commission condemned agreements entered by SP and UP to implement the original condition. SP and UP then became appellants. The Supreme Court's order ends the controversy.

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USS COR-TEN High-Strength Low-Alloy Steel not only has extraordinary resistance to atmospheric corrosion and normally holds paint up to twice as long as carbon steel, but also is 40% stronger than regular carbon steel. It gives cars the stamina to withstand continuous punishment and to set records for uninterrupted service.

USS COR-TEN Steel can be used (1) in the same thicknesses as carbon steel to provide much greater strength and far longer service life with the same payload, (2) in thinner sections to provide equal strength and service life with a maximum reduction in weight and increase in payloads of several thousand pounds per car, or (3) in

intermediate thicknesses to provide, at the same time, a lesser but worthwhile increase in strength, payload and service life.

USS TRI-TEN Steel, another relatively low-cost weight reducer, has excellent resistance to fatigue. USS EX-TEN Steel's favorable strength-to-cost ratio makes it the biggest carbuilding bargain around. For especially rough impact/abrasion applications, use USS "T-1" Steels.

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USS United States Steel

GN LINE CHANGE TO COST $110 MILLION

All phases of work for constructing 60 miles of main track connected with building of Libby dam in Montana are now under way. A tunnel will be the second largest in the western hemisphere.

The target date for the Great Northern to begin train operation over a new 59.4-mile route in northwestern Montana is Nov. 1, 1970. It appears that this date will hold. The last of the five work-contract phases was let and work was begun in March. Phase I was started in April 1966.

The new main-track route was necessary to remove the existing track from the valley of the Kootenai River, where the U. S. Army Corps of Engineers is building a dam at a cost of $352 million near Libby, Mont. The dam is part of a comprehensive plan for development of the Columbia River basin in the interest of flood control, power generation, recreation and related water uses. The dam, 3,055 feet long across the top, will rise 420 feet above bedrock. It will create a reservoir 90 miles long, backing water 42 miles into Canada. First concrete for the dam is to be poured May 15.

● **Computer points the route.** Libby dam was first proposed by the Corps of Engineers in 1955. But it was not until January 1961 that the Great Northern was advised that the project had become active. The Corps of Engineers had investigated eight possible railroad routes and the railroad was given the opportunity of choosing one of these. After several meetings it was agreed that only four would be studied and investigated further.

The railroad made computer studies to determine the costs of maintenance for each of the four routes. The Corps of Engineers and the GN agreed that one of the routes was the most practical. The route, estimated to cost $110 million, requires boring a tunnel seven miles long. When completed, the tunnel will be the second largest in the western hemisphere, exceeded only by Great Northern's Cascade tunnel in Washington, which is 7.79 miles long.

● **Shortens route.** At its easterly end the new line connects with existing track near Stryker, Mont. From there it follows Fortine creek upstream to the Fortine-Wolf Creek summit, beyond which it follows the Wolf creek and Fisher River valleys downstream to a connection with existing track at the mouth of the Fisher River near Jennings, Mont. The new route is shorter by 14.5 miles, but it includes ruling grades of 1% in each direction, compared with 0.70% eastbound and 0.25% westbound on the present line.

However, only 27% of the new mileage will be on curves, compared with 36% of the existing line. The latter has 108 curves totaling 2,899 degrees of central angle, compared with 37 curves on the new line with 1,218 degrees of central angle. Sharpest curve on the new line will be 2 degrees 14 minutes, compared with 4 degrees 24 minutes on the old route.

In addition to the tunnel, the new line will require construction of 15 major bridge structures over waterways, one highway overpass and one underpass, plus numerous culvert installations and channel diversions.

Including those at the beginning and end of the line change, seven sidings approximately 10,000 feet long will be constructed. One such siding will be at each end of the tunnel.

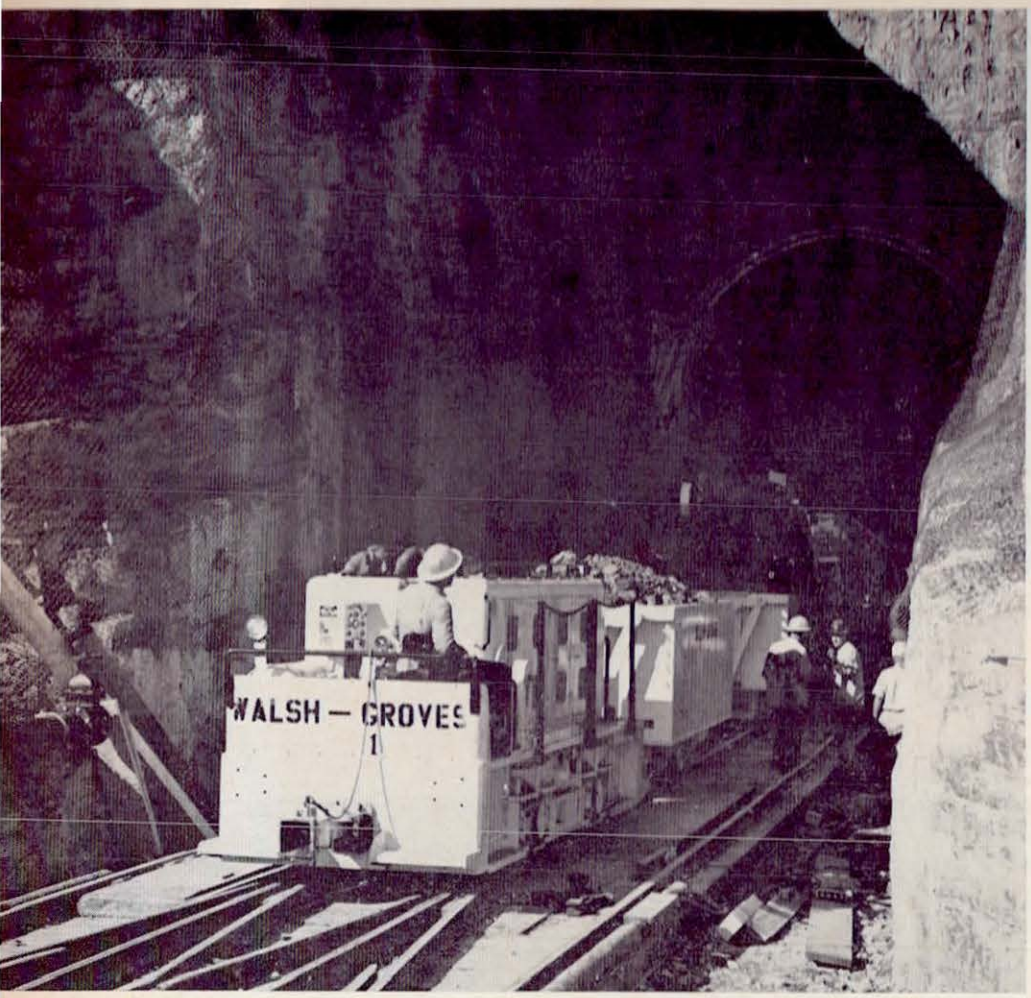
The Corps of Engineers divided the railroad line-construction project into five separate work-contract phases. These range from 9.7 miles to 15.2 miles in length. Phase 2 includes the boring of the tunnel and, while shorter than the other work phases, will require the longest time to complete.

● **Will "hole-through" soon.** The tunnel has been named the Flathead tunnel because it passes under several mountains of the Flathead range. It is on tangent alignment and on a 0.46% grade ascending easterly. The tunnel is being drilled from each portal toward its mid-point by crews working 24 hours a day in three shifts. The crews expect to "hole-through" in late May or early June. But it will not be until late 1970 before all tunnel work has been completed.

Before a railroad decides to operate through a tunnel, especially one as long as this one, it must be certain its operations will not be suddenly terminated because of tunnel failure. It was known that there is a fault zone about 1,200 feet long in the vicinity of the tunnel and another one about 2,000 feet long, not far from it. From a 10-year earthquake record made by a seismograph at Hungry Horse dam, about 60 miles from Libby dam, government geologists

GRADING EQUIPMENT can be seen at several points along the new route. After blasting, stone is picked up by loaders.

DRILLING JUMBO, three decks high, moves along rails to tunnel heading, where 100 holes are drilled for blasting.



MUCKING TRAIN moves in after blasting, behind a mucking machine. Latter clears debris, loads it onto the train. Rails are laid ahead to reach the rock face.

convinced the Corps of Engineers and the GN that no difficulty due to the fault zones will be experienced at the Flathead tunnel.

The Corps of Engineers employs two geologists to watch rock and soil excavation in the tunnel. From the formations encountered at each heading, they decide when rock bolts, rock bolts with steel mesh or steel sets must be installed, as well as the distance apart, for securing the rock. Two laser beams are utilized for aligning the drilling through the rock. Because of this modern technique, the crews expect to come together within two inches of each other's alignment.

The bore is being drilled 22 feet wide by 26 feet high under the arch crown. It will have a concrete lining, 2 feet thick, that will provide lateral clearance of 9 feet each side of the center line for 14 feet above the top of rail to the arch spring line, and a vertical clearance of 23 feet above top of rail at the center line.

● **The ventilation problem.** Long tunnels present a problem not inherent with short tunnels. The problem is how to remove engine gases coming from locomotives. From its experience with the Cascade tunnel, the Great Northern knew that a train acts like a piston and pushes the air ahead of it in the bore. Consequently, the air surrounding the train moves along with it. This means that trailing units of a string of four diesel locomotive units, when working upgrade, may heat up and cut out. Locomotives on westbound trains going down grade do not overheat because they are drifting.

GN found the answer. It installed a door at the east end of the Cascade tunnel to force the air ahead of a train back against it, thus carrying air to the engines. The road also installed a powerful fan at the same portal to bring fresh air in and purge the tunnel.

A similar system is planned for the Flathead tunnel. Lincoln Electric Co. has built a 24.9-kv power line to the east portal where a door, two ventilating fans and a machinery house are being installed. The latter will include a stand-by electric generating plant.

● **Purging the tunnel.** Trains passing through the tunnel will control the operation of the door and fans, through track circuits that will be part of the road's CTC system. When a westbound train receives a clear signal to enter the tunnel, the door will be in its normal raised position. The train will pass through the bore and upon its exit will shunt a track circuit causing the door to close and the fans to turn on for purging the tunnel.

An eastbound train will also shunt the track circuit as it approaches and the door will lower to the closed position. It will remain closed until the train is within about 3,900 feet of the door, where another track circuit will cause the door to open to allow the train to pass. After the train leaves the bore, the door will again close and the fans turn on for purging.

The entire ventilation system is intended to be fully automatic in operation. However, the automation may be over-ridden by the dispatcher through CTC remote control or by controls within the machinery house.

● **"Fail-safe" features.** The door will be maintained in the open position by counterweights. It must be lowered and raised under power. If electric power fails while the door is lowering or is in the lowered position, provision has been made for a clutch to disengage, letting the counterweighted door rise. Because the clutch might not disengage (during a power failure), the road will provide a breakable section in the door that will break out under train impact.

The tunnel will contain 20 refuge bays along one wall. These will be 12 feet square and 9 feet high, large enough to shelter a crew and its motor car. Each bay will contain a telephone and four air packs, and will be identified by a continuously lighted designated number. Along the opposite wall will be 16 transformer bays where three-phase power receptacles will be available for powering motor-operated air compressors and electric tools. The receptacles will be available at 600-foot intervals.

Radio communication can be a problem in tunnels. Although the transmitting range of a radio might be as much as 5 miles in the open, it could be only about 1,200 feet in a tunnel, depending upon absorption of radio signals by reinforcing steel in the tunnel walls. To insure radio end-to-end train communications in the tunnel, the road will install receiver-transmitter relay stations at intervals to be determined under actual operation.

Foam-type fire-fighting apparatus will be available at each portal. In addition, a hotbox detector and a dragging-equipment detector will be installed about two miles in advance of each portal to warn train crews of cars with such defects. ■

LETTERS

Passenger service proposals

Philadelphia, Penn.

To the Editor:

Your "Viewpoint" on April 1/8, 1968, asks, "Who Has A Positive Program For Passenger Service?" The remainder of that issue makes a positive program unlikely. But the "winds of change" must waft in a positive program or the freight business itself is doomed, as a business. I think we would be doomed to a second-rate economy as a nation if we didn't have railroads, somehow.

We associated with transportation all know that rail freight costs but one-fourth as much per ton-mile as truck, but so many of the shippers prefer truck because service is better. The self-serving businessman will always opt for truck transportation if there are subsidies because he likes it better.

This is most unfair to the vast majority of the nation's people who pay taxes, and to the minority of self-reliant businessmen. If we don't develop more self-reliance in the economy, I am sure you agree with me where we are all going.

A freight car and 1,000 feet of track to put under it cost $33,000. The annual interest, depreciation and income taxes on such a profitable investment would be $4,500. The freight car makes 18,000 miles a year. That figures to 25¢ per car-mile for capital costs alone, with nothing for operation or labor. Revenue is only 30¢ per car-mile. The freight business doesn't look too good long term. Neither does it have political support. With socialistic financing, that 25¢ a car-mile capital cost would tumble to 16¢ per car-mile, increasing the margin for operating expenses from 5¢ to 14¢. Much as we all abhor socialism, you can see what public investment in airports and highways is doing to private enterprise.

The public is no longer excited about "private enterprise." Barry Goldwater proved that. The railroads will have to get airline- and highway-type financing to permit continued technological activity in truly low cost transportation.

That returns the subject to passenger service. Forget the $2-billion investment of 20 years ago. It was wasted on a botched mixture of good and bad selling, good and bad scheduling, and mostly bad pricing that diverted traffic in a declining market. It is now true that common carrier passenger service by bus and train and short haul air is so bad from a public convenience stand-

(Continued on page 44)

Remember when
life in a caboose was one jarring jolt after another?

That was before International installed cushioning in its underframe

Time was when every impact translated itself the length of the train like the crash of cannon fire. It was devastating to the caboose car body and murder on the men. Today, thanks to International-installed cushioned underframes*, trains glide into motion or to a stop without ruinous run-in or run-out. It lengthened the life of the equipment and protected the life of the crew. One more International contribution to safer, more efficient caboose operation.

*1967 — 100% of International-built caboose car underframes were cushioned.

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Circle 21 on coupon page 34

point that the voters may listen to constructive ideas.

Railroads as a group, can offer the nation a package solution to the various problems that is saleable. The object is not just to solve the passenger problem, but to solve the over-all railroad capital problem which is ruining freight service. (Forget "Super C"—let's talk volume, and the failure to hold growing tonnage.)

Railroads can tell the public, and the Congress, that they can move people at less cost than any other means, and faster on the ground than any other means, and faster than any other means over any average trip distance (under 100 miles). Like other promotions, railroads can tell the nation that they are ready and willing and able to really do something for the public, but like airlines and interstate highways, they need financing. Just ask for federal reinvestment of income taxes, and ad valorem taxes locally, in the facilities railroads need to perform. No subsidy. Just a fair shake. There is a waiting market for 250,000,000 non-commuter railroad trips each year, without depopulating any transcontinental airliners. That is a billion-dollar annual market.

How can I say railroads are cheaper and faster? A one-car train of modern technology costs 1¼¢ per seat mile to own and operate, or 3.2¢ per passenger mile at 40% load factor. A full-size train costs less than 3¢. Buses on interstate highways can't serve intermediate cities, and local buses can't compete.

The old way of doing business won't do, but neither is new technology the answer, except occasionally. Astute management on a system basis is the crying need. No more union station agreements. No more failure to sell competitive routes. No more schedules that don't fit passenger convenience. No attempt to do business on a 500-passenger basis or nothing.

A billion-dollar annual revenue will pay for 800,000,000 car miles a year. Schedules can be developed to serve the population centers with convenient schedules within that budget. Long-haul trains would merely be continuations of short trips. Why not a New York, Newark Trenton, Philadelphia, Lancaster, Harrisburg, Altoona, Johnstown, Pittsburgh, Youngstown, Cleveland, Sandusky, Toledo, Elkhart, South Bend, Gary to Chicago train 8 a.m. to 11 p.m? Fares would become less per mile with distance. Most passengers would be short, but a few long ones contribute out of proportion in revenue. That is how Greyhound built up.

Many other similar lines are possible, such as Boston, Worcester, Springfield, Pittsfield, Albany, Utica, Syracuse, Rochester, Buffalo, Erie, Cleveland, Akron, Columbus, Springfield, Dayton, Cincinnati, Louisville for example. All fit together into a useful system, with one-car trains at off hours when potential round tripping justifies the effort to fill better trains.

The better tracks, public attention, community benefits, and understanding that would come from a railroad proposal to join the contemporary society and offer something that looks useful, as well as being technologically efficient, would be a boon to freight service, as well as people, because it would free railroads from dependence on the well intentioned but impossibly obsolete idea that private enterprise can compete into the future with federal spending on transportation plant.

E. L. Tennyson
Professional Engineer

DIVIDENDS

PITTSBURGH & LAKE ERIE.—$1.50, quarterly, paid April 15 to holders of record March 29.

UNION PACIFIC.—50¢, quarterly; 4% Preferred, 20¢, semiannual, both paid April 1 to holders of record March 11.

WABASH.—4½% Preferred, $4.50, annual paid April 15 to holders of record April 1.

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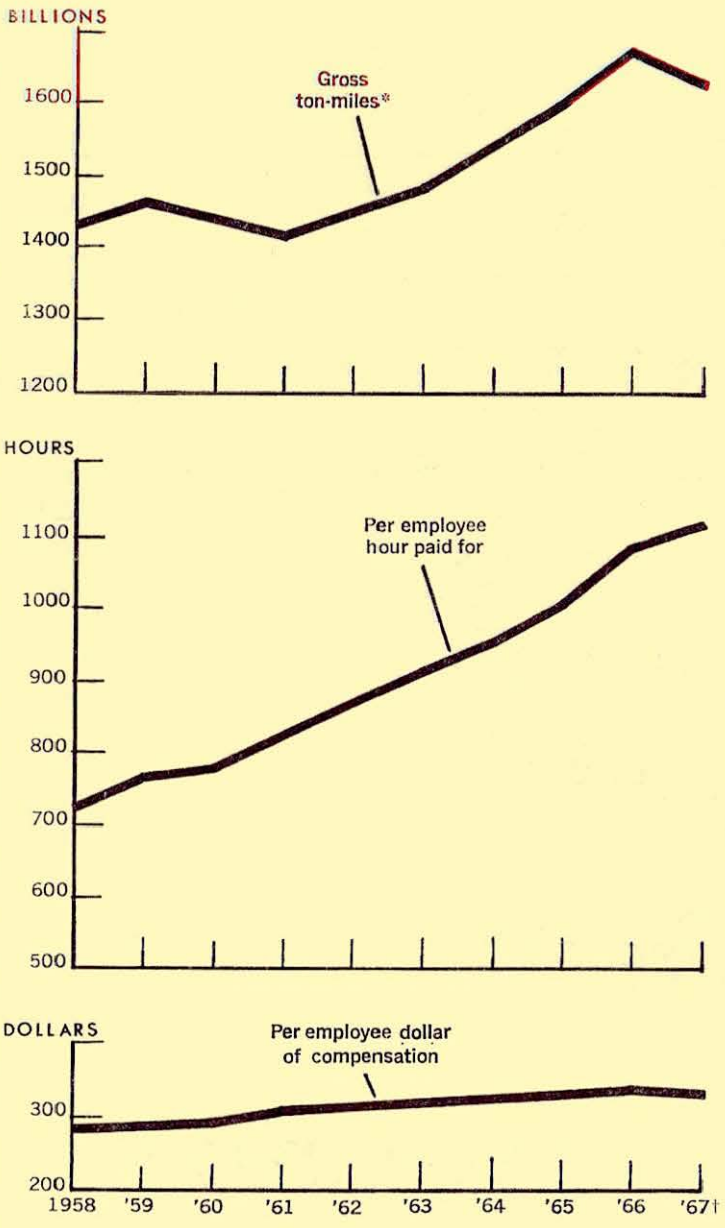
(Class I line-haul railroads)



*Billions (represents gross ton-miles of cars, contents and cabooses in both freight and passenger services).

†Preliminary.

Source: Bureau of Economics, ICC.

Current statistics

Carloadings, revenue freight	
18 wks., 1968	9,403,713
18 wks., 1967	9,554,238
New freight cars on order	
Apr. 1, 1968	22,933
Apr. 1, 1967	42,055
New freight cars delivered	
3 mos., 1968	16,179
3 mos., 1967	24,474
Serviceable cars	
Apr. 1, 1968	1,401,160
Apr. 1, 1967	1,422,997

FREIGHT-CAR DELIVERIES

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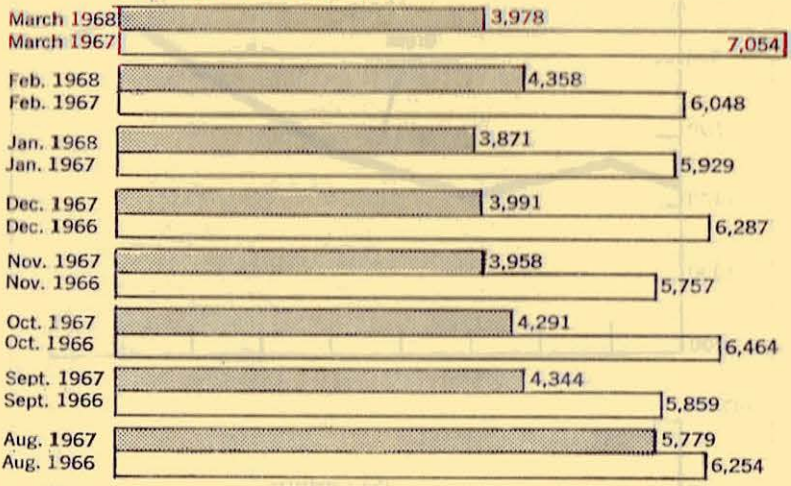
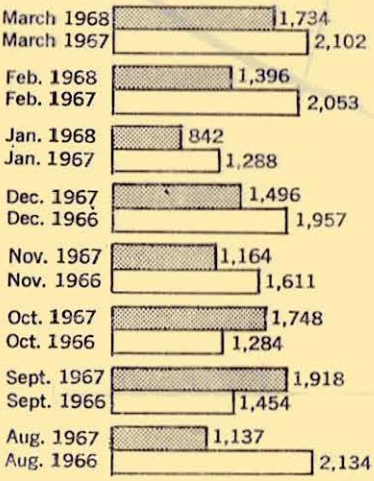


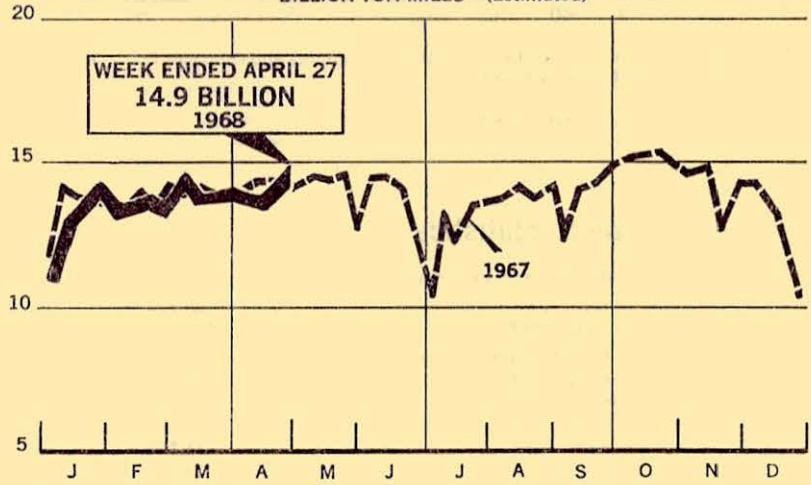
RAILROAD SHOPS



Source:
American Railway Car Institute and Association of American Railroads.

RAIL FREIGHT TRAFFIC TRENDS

BILLION TON-MILES (Estimated)



Source: Association of American Railroads

MARKET OUTLOOK

CARLOADINGS

Loadings of revenue freight in the week ended May 4 totaled 580,920 cars, the Association of American Railroads announced on May 9. This was an increase of 10,976 cars, or 1.9%, compared with the previous week; an increase of 16,551 cars, or 2.9%, compared with the corresponding week last year; and a decrease of 21,324 cars, or 3.5%, compared with the equivalent 1966 week. Ton-miles generated by carloadings in the week ended May 4 are estimated at 15.1 billion, an increase of 5.9% above the corresponding week of 1967, and 1.3% above the 1966 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, May 4

District	1968	1967	1966
Eastern, including Allegheny and Pocahontas ..	235,204	228,747	243,998
Southern	122,452	117,628	119,505
Total Eastern and Southern Districts	357,656	346,375	363,503
Northwestern .	74,328	71,909	85,335
Central Western	108,349	108,006	114,007
Southwestern .	40,587	38,079	39,399
Total Western Districts	223,264	217,994	238,741
Total All Roads	580,920	564,369	602,244
Commodities:			
Grain and Grain Products	33,934	40,572	51,395
Livestock	1,288	1,482	2,011
Coal	107,141	116,436	110,104
Coke	7,770	7,607	8,991
Forest Products	40,582	38,375	40,997
Ore	50,182	44,670	53,924
Merchandise l.c.l.	3,924	4,847	6,456
Miscellaneous .	336,099	310,380	328,366
May 4	580,920	564,369	602,244
Apr. 27	569,944	567,862	574,093
Apr. 20	557,100	560,891	543,639
Apr. 13	543,918	553,996	543,049
Apr. 6	528,398	543,761	568,683
Cumulative total, 18 weeks ...	9,403,713	9,554,238	9,821,097
Estimated revenue ton-miles (billions) weeks	250.4	248.8	249.0

PIGGYBACK CARLOADINGS

U. S. piggyback loadings for the week ended Apr. 27 totaled 26,549 cars, carrying 41,377 trailers, compared with 20,776 cars, carrying 34,066 trailers, in the corresponding 1967 week. Loadings for 1968 up to Apr. 27 totaled 417,922 cars, carrying 677,719 trailers, compared with 379,546 cars, carrying 623,003 trailers, in the corresponding period of 1967.

IN CANADA

Carloadings for the 7-day period ended April 21 totaled 70,574 cars, compared with 64,190 for the previous 7-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd. from Connections
Totals for Canada		
April 21, 1968	70,574	24,731
April 21, 1967	71,945	26,223
Cumulative Totals		
April 21, 1968	1,065,098	381,374
April 21, 1967	1,111,364	396,671

NEW FACILITIES

• *Penn Central.*—Will increase capacity of Big Four Yard at Avon, Ind., from 4,700 to 5,800 cars, to permit additional classifications and faster receiving and dispatching. Most of the work on the $3-million project will be handled by company forces. PC will lay 28,000 feet of new receiving and departure track and 14,000 feet of new main track. Old main track will be converted to departure-yard status. In addition, a new connection will be provided between the yard and the Indianapolis-Vincennes line of the former Pennsylvania, to improve routing of coal traffic from southern Indiana. And the Flexi-Van terminal now located at Avon Yard will be consolidated with the existing TrucTrain terminal at Hawthorne Yard, Indianapolis, a former PRR facility. Big Four Yard at Avon was built by New York Central in 1960, and now serves as the main PC yard for traffic moving through the St. Louis gateway.

FOREIGN

• *Mexico.*—A $20,670,000 Alliance for Progress credit will be used to purchase U.S.-manufactured equipment for Mexican railways, including 51 diesel locomotives, signal and communications equipment, and track machinery. The loan was arranged by the Export-Import Bank and Nacional Financiera, S.A., the Mexican credit agency. It will be repaid in 17 semi-annual installments beginning in 1970, at 6% interest. Since 1945 Eximbank has authorized more than $270 million in railway loans to Mexico.

CAR OWNERSHIP

• *Serviceable cars decline.*—Revenue freight cars in serviceable condition owned by Class I railroads on April 1 totaled 1,401,601, compared with 1,422,997 on April 1, 1967, according to most recent AAR Car Service Division report. Estimated total ownership of all railroad- and privately-owned revenue freight cars on April 1 (see below) was 1,815,909 (average capacity: 63.3 tons), compared with 1,830,515 (average capacity: 61.6 tons), on April 1, 1967.

ESTIMATED OWNERSHIP—ALL REVENUE FREIGHT CARS
(April 1, 1968 vs. April 1, 1967)

		Box	Covered Hopper	Gondola	Hopper	Flat	Refrig.	All Others	Total
Class I	1968	563,261	120,705	198,990	417,722	67,675	51,785	57,787	1,477,925
	1967	579,602	109,427	206,404	427,075	66,037	49,661	59,320	1,497,526
RRO&C Refrig*	1968	0	0	0	0	0	50,374	0	50,374
	1967	0	0	0	0	0	53,340	0	53,340
Private	1968	1,469	28,100	292	2,828	40,936	15,290	172,129	261,044
	1967	1,857	26,194	599	1,745	36,460	15,325	171,104	253,284
Class II & S&T†	1968	9,298	893	5,277	8,668	649	687	1,094	26,566
	1967	9,122	813	5,503	8,521	702	558	1,146	26,365
GRAND TOTAL	**1968**	**574,028**	**149,698**	**204,559**	**429,218**	**109,260**	**118,136**	**231,010**	**1,815,909**
	1967	**590,581**	**136,434**	**212,506**	**437,341**	**103,199**	**118,884**	**231,570**	**1,830,515**

*Railroad owned and controlled refrigerator car lines.
†Class II railroads and switching and terminal companies.

YOU OUGHT TO KNOW

GTW: "Yes, we have more commuters" Grand Trunk Western isn't yet in the same league with a Long Island or a Chicago & North Western as a commuter-carrier—but it's not for lack of trying. It may be tough to compete with the automobile in the Motor City—but Grand Trunk's Detroit-Pontiac service seems to be doing it: Commuter traffic for the first quarter of 1968 was up by 42% from January-March levels a year ago.

Acquisitions approved by Stanray Directors of Stanray Corp. have approved terms for the acquisition of two companies, Johnson Industries Corp., of Indianapolis; and Leetronics, Inc. of Brooklyn, N.Y. Johnson is a diversified manufacturer of corrugated shipping containers, coiled springs, and fabricated aluminum products. Leetronics is a manufacturer of mechanical springs. H. P. Kibbey, president of Stanray, noted that the acquisitions "will tend to offset the cyclical pattern of the company's traditional lines, notably the railway equipment division." Railway supply now accounts for about 50% of Stanray's business. After the acquisitions, the figure will be 30%.

RSMA sessions planned May 27-28 in Chicago Railroad freight service will get a thorough going over by railroaders and industrial traffic managers at a two-day seminar of the Railway Systems and Management Association, May 27-28. The program will include discussions of car performance, automatic car identification, the potential for marketing railroad service, rail service from the customer's viewpoint, and how railroads are meeting the service challenge.

Wartime transport officer honored in Washington A bust of the late J. Monroe Johnson, former member of the ICC and wartime director of the Office of Defense Transportation, was dedicated last week in the rotunda of the Commission's headquarters building in Washington. It takes a place there with busts of the first Commission chairman, Thomas M. Cooley, and the late Commissioner Joseph B. Eastman, who was Johnson's predecessor as ODT director. The bust was presented to the Commission by the Association of ICC Practitioners.

Containerization program planned for New York Experts on containerization will gather in New York June 10-12 for a technical congress sponsored by the Bulk Packaging and Containerization Institute. The sessions, to be held at the New York Hilton, will be in conjunction with the First National Exposition for Export Services and Containerization in the New York Coliseum, June 10-13.

Penn Central sounds off for station features A military muster with colonial-clad fifers and drummers (above) was part of a program conducted by Penn Central in dedicating renovated passenger facilities at Baltimore. A new platform and a passenger conveyor belt to serve this important Northeast Corridor station were dedicated at the ceremonies hosted by Penn Central vice president John E. Chubb. The Metropolitan Baltimore Chamber of Commerce and a dozen tourist-oriented Maryland organizations participated in the "Discover America—Begin With Maryland" exhibition.

F. G. Butcher
Burlington

Emil C. Jesse
C&O-B&O

Philip M. Lanier
L&N

A. W. Polich
TP&W

R. E. Sosamon, Jr.
TP&W

John W. Burkard
WP

PEOPLE IN THE NEWS

BURLINGTON.—Frederick G. Butcher, district sales manager, Seattle, appointed assistant vice president, western region, San Francisco, to succeed **Starr S. Hankis,** who retired May 1. **Orla K. Lucas,** general agent-passenger department, San Francisco, named assistant sales manager there.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.—Emil C. Jesse, assistant to vice president, appointed administrative assistant vice president of operations, Baltimore.

Dr. Isadore Kaplan, director of medical services, C&O, and medical and surgical director, B&O, elected president, American Association of Railway Surgeons.

CHICAGO & NORTH WESTERN.—J. A. McDaniel named assistant superintendent, Dakota division, Mankato, Minn.

GULF, MOBILE & OHIO.—Codie E. Thomas, division freight traffic manager, Mobile, Ala., retired March 31, after more than 48 years of service. **W. E. Karcher, Jr.,** assistant general freight agent, Mobile, promoted to general freight agent there. **E. G. Browning** promoted to division freight agent, Mobile.

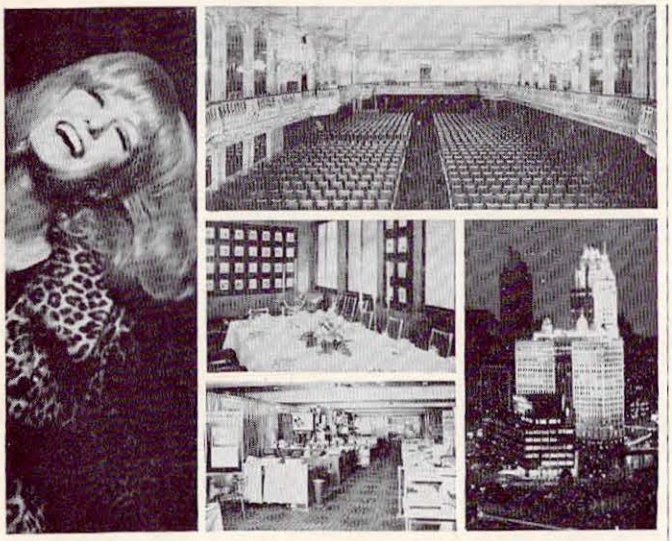
LONG ISLAND.—Robert A. Patterson, secretary and treasurer, Jamaica, N.Y., resigned April 30. **George M. Onken,** vice president—general counsel, has taken over the secretary's function. **Thomas P. Moore,** controller, appointed treasurer—controller.

Paul A. Blauvelt has been named director of the new Department of Safety, Jamaica, N.Y. Mr. Blauvelt has been assistant director of public relations. He will maintain liaison with various federal safety administration agencies operating under the Department of Transportation.

LOUISVILLE & NASHVILLE.—Philip M. Lanier, assistant vice president-law, appointed vice president-law, to succeed **William L. Grubbs,** who retired Apr. 29 after more than 50 years' service. **C. S. Sanderson,** vice president-staff, retired Apr. 29 after 45 years of service.

NORFOLK & WESTERN.—William D. Roe, assistant coal traffic manager—rates, named assistant vice president—rates, a new position. **Harry A. Klester,** manager—engineering services, appointed director—engineering services, also a new position.

Donald E. Middleton and **Joseph Pakush,** assistants to the secretary of the N&W, ap-



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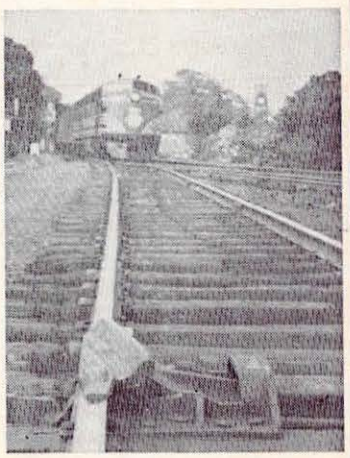

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Circle 24 on coupon page 34

pointed assistant secretaries.

Edward J. Siemon, Jr., assistant coal traffic manager, promoted to coal traffic manager—rates, a newly created position.

E. W. Nappier, traffic manager, St. Louis, appointed general traffic manager-pricing there, to succeed **W. T. Thomas,** retired. Mr. Nappier's successor is **Robert G. Wood,** assistant traffic manager, St. Louis, who in turn is replaced by **George M. Irvin,** sales manager, St. Louis. **Lester G. Thompson, Jr.,** district sales manager, St. Louis, succeeds Mr. Irvin, and in turn is succeeded by **William G. Koehler,** sales representative.

Sidney Falkenstein, general attorney at Roanoke, and **Robert G. Boes,** senior general attorney at Cleveland, promoted to general solicitors at those points.

NORFOLK SOUTHERN.—On May 1 opened a sales office in Room 500-A, Milner Bldg., 118 North Royal Street, Mobile, Ala., 36602, under jurisdiction of **John H. Grotheer,** district sales manager. The Birmingham, Ala., office closed on May 1.

NORTHERN PACIFIC.—**Ivan Doseff, Jr.,** named manager of personnel development and retention. He was formerly personnel director for organization and planning, **Ellerbe Architects,** St. Paul (RA, April 29, p. 82).

J. J. O'Keefe, associate industrial engineer, St. Paul, appointed assistant purchasing agent there.

H. C. Hoving, manager of passenger and station accounting, named manager-passenger accounting, St. Paul. **D. T. Nicoll,** senior methods analyst, management services department, becomes manager of station accounting, St. Paul.

E. H. Stanchfield, general car service agent, St. Paul, named manager of freight car utilization at that point, to succeed **T. G. Overlie,** named systems analyst, management services department, St. Paul. **A. A. Richter,** assistant shop superintendent, Como Shops, St. Paul, appointed assistant superintendent of the car department, St. Paul. Title of **C. C. McLean** changed from assistant superintendent of rules, safety and fire prevention to assistant general superintendent of that department. **C. A. Bentley,** assistant to the superintendent of rules, safety and fire prevention, named superintendent of safety.

READING.—**Lois M. Morasco,** public relations representative, Philadelphia, appointed assistant to the director of governmental and public relations.

REA EXPRESS.—**Henrik P. Rothlisberger,** manager, international development, Atlantic Region, New York, appointed director, international sales.

SOUTHERN.—**J. Wiley Cox,** director of labor relations, promoted to assistant vice president—labor relations, remaining at Washington. **Thomas Parker, Jr.,** assistant director of labor relations, promoted to director of labor relations.

James E. Caldwell, terminal trainmaster, Spartanburg, S.C., named superintendent of terminals there.

TOLEDO, PEORIA & WESTERN.—**A. W. Polich,** chief engineer, also named general manager. **R. E. Sosamon, Jr.,** manager of special sales and service, appointed superintendent. **Jack R. Brown,** trainmaster, becomes assistant superintendent. **Earl C. Franks,** assistant trainmaster, named trainmaster.

WESTERN PACIFIC.—**John W. Burkard** appointed manager-container services development.

Who's Who in Railroading

Biographical data forms for the forthcoming edition of Who's Who in Railroading have been mailed. To be included in the new edition, completed data forms must reach the publisher by May 20 for persons with surnames beginning with the letters from A to K, inclusive. Data for persons with surnames beginning with the letters from L to Z, inclusive, must be received by June 3. Please address all forms to F. C. Osthoff, editor, Who's Who in Railroading, 30 Church St., New York, N.Y. 10007.

OBITUARY

T. Frederick Burris, 68, former chief engineer—system, maintenance and construction, signals, communications and water supply, **Chesapeake & Ohio,** Huntington, W. Va., died May 5. When he retired in 1964, Mr. Burris was president, American Railway Engineering Association, and chairman, Engineering Division, Association of American Railroads.

Harry I. Wrigley, retired vice president, **Universal Railway Devices Co.,** Chicago, died April 30, in the Presbyterian Home, Evanston, Ill.

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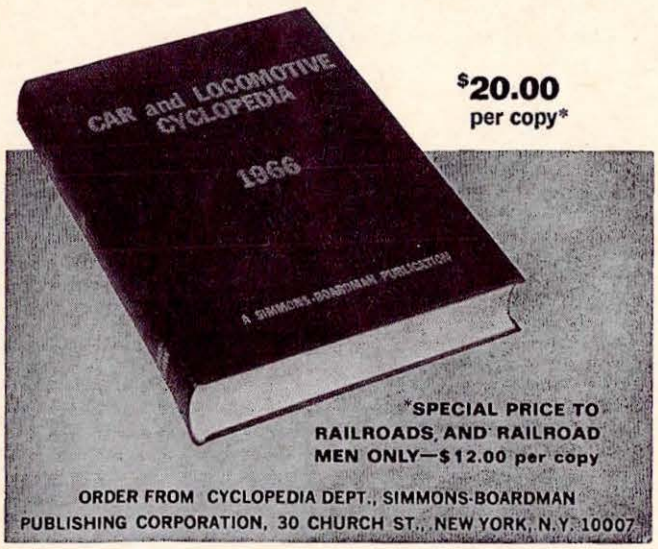

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VIEWPOINT

Let's work for a real Transport Week—now

Transportation could be described as the nation's biggest industry. It could be argued that without the transportation industry there would be no GNP—because no matter what a producer produces, it is not of much use until it passes through the distribution pattern.

So it is eminently fitting and proper that there should be a National Transportation Week. It has been proclaimed again by the President, and it began Sunday, May 12.

Across the country, there will be observances of various sorts—luncheons, speeches, press conferences and so forth. The importance of transportation to the nation's economy, to its very survival, will be impressed upon the public. And through it all, thoughtful students of the distribution processes will keep wondering: How much better could it all be, if. . . .

That list of "if" clauses can grow to be a big one. It may just be, now, the stuff that dreams are made of. But how much better off *would* transportation and its users be:

—If there were true transportation companies, instead of steel-wheel companies and rubber-tire companies and fan-jet companies, for the most part restricted to operations within one mode?

—If government support and promotion of transportation in all its aspects were re-created equal?

—If taxing policies at all levels, including the federal, were revised to provide for fair and equitable treatment and to shift the burden of governmental financial support from the general taxpayer to the user?

—If transportation labor law could be rewritten in such a way as to guard the rights of both management and the employee and still protect the public against transportation-strike paralysis?

—If innovation in all areas of transportation could be truly encouraged and not feared, as it often seems to be?

—If transportation plant and services could be reshaped to better fill the needs of today and prepare for those of tomorrow?

—If a greater degree of rationality could be injected into transportation-investment decision-making, public and private?

BUT—HOW CAN IT BE BROUGHT ABOUT?

The list could go on. But enough is enough. Some consideration ought to be given to the "how" factor, and Illinois Central President William B. Johnson looked to the future, a few days ago, with observations like these: "Transportation buyers, acting with conviction from their highest management levels, will demand a degree of efficiency and coordination impossible today. . . .Shippers may very well provide the pressures that will lead to more rational public and private investment and to more intelligent policies on the part of government and organized labor. Shippers may very well eventually force national policy changes to allow intermodal ownership, so that full advantage can be taken of available efficiencies—in advance of crises which otherwise could very well develop."

And if—that word again—it all came to pass? We'd really be celebrating National *Transportation* Week.

on guard

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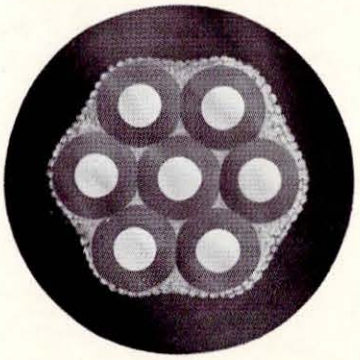

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